MONDO
2000
BRENDA LAUREL
TERRORVISION
DEEE-LITE
ISSUE 7 · $5.95 CANADA · $6.95
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Bill Sienkiewicz

Political satire and timely comment by

Peggy Gordon

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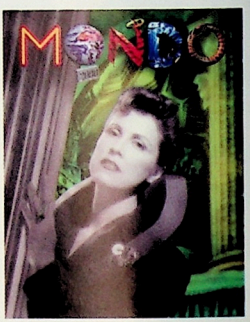
JIM CHERRY

Deep in the Hypothalamus lies a vestigial organ where sadness and happiness unite. First described by Bittersüss in 1868, it's precise function still eludes neuroscience. That little blue dot is how I feel when I finish an issue: relief, despair, ejaculation.

And now thanks to all the creative hominids involved in the making of this issue.

Cover Details

The cover photograph of Brenda Laurel was realized by the following people:
Frances Sorenson: Hairstylist
Jake: Make-up Artist
Travis Jaggers: Clothes Stylist
Jennifer Parker: Vintage clothing
Brooke Battle: Jewelery
Liz Zivic: Zymyth Studio
Jacqueline Neuwirth: Assistant
Heide Foley: Production Coördinator and *femme inspiratrice*
John Barlow: Stopped by to visit.



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MONDO 2000 has monthly bonfires at the full moon of all unsolicited manuscripts. Unsolicited art work will be electronically scanned and altered and appear uncredited in other magazines.

MONDO 2000 now has an electronic conference on the computer conferencing system called the WELL. You can reach the WELL with any combination of computer and modem. For more information call: 415.332.4335 (voice line)

I shot Kodak T-max 100 ISO and Ektachrome Plus 100 film with a Hasselblad 503cx and Speedotron strobes. I used a Bogen tripod and various Mathews stands. I took the film to Gamma Photo Lab on 9th street off of Folsom, I parked my 1978 gold Honda Accord, with Arizona license plates, on the sidewalk next to the police uniform store and walked around the corner and up the stairs to Gamma, where I submitted the film and requested normal processing, and two sets of contact sheets, so Brenda could have a set.

Brenda is still waiting.

The Spine

Is by John Borruso, as always.

And Here's a List of Contributing Artists

Appreciate them if you'd like, hire them if you're able, love them as you would yourself.
Larry Ashton, Egon Bartolomeus, Jay Blakesberg, Anthony Bondi, John Borruso, Tim Brock, Brummbär, Julia Colmenares, Kendra Dodsworth, Frances Dosé, Marc Franklin, Lorelie Froman, Jill Greenberg, Glen Kim, Andrew Kong, Miles Ludvigsen, Peter Menzel, Stephen Stickler, Michael Swaine, and Eric White.

Jim Cherry, Jim Cherry, Jim Cherry

The Happy/Sad neon sculpture above is by Jim Cherry, whose artwork has appeared in past issues. He has also contributed to our upcoming book, *A User's Guide to the New Edge*. He will be exhibiting his recent work in a show entitled *Out of Bounds: The Word Becomes Art* at the Scottsdale Center for the Arts, in Scottsdale Arizona, through Sept. 13.

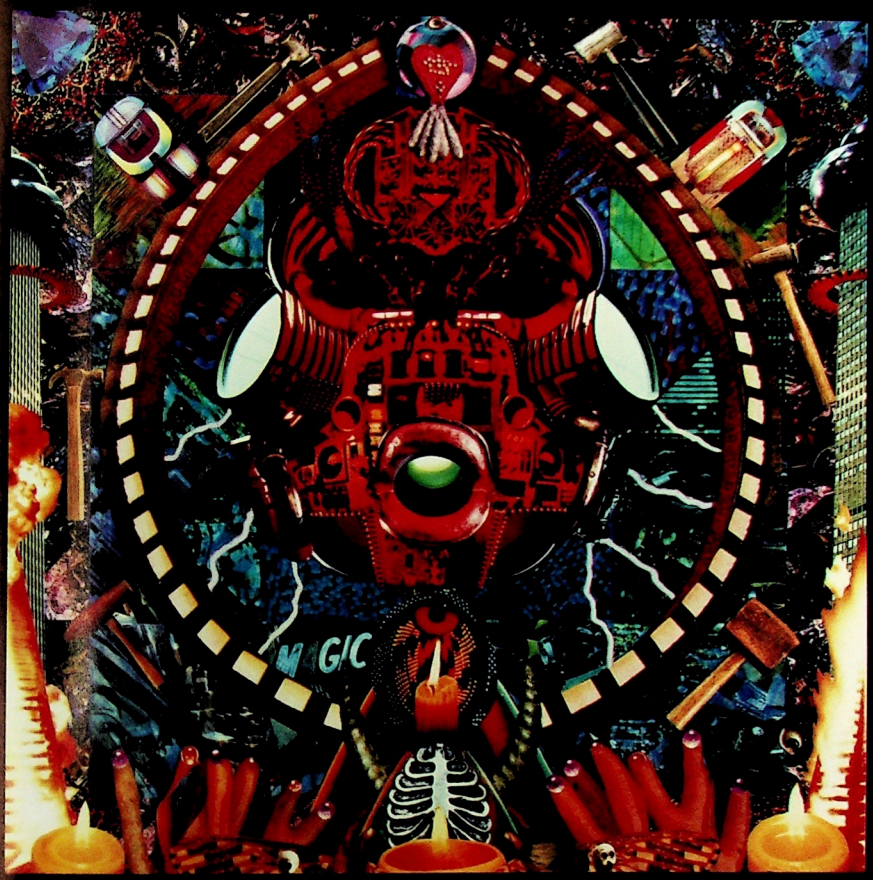
Additional Credits

The Deee-Lite photographs starting on page 72 would not have been possible without, first of all, Jill Greenberg, the photographer, but also hairstylist Orlando for Bumble & Bumble, make-up artist Joe McDevitt for Pierre Michel, stylist Leviathan, assistant Gökhan Karakus, and for the slide scanning, Ken Hansen Imaging.

Patrick! we've phoned, we've faxed. Please come by for high tea and a low check. (Patrick Woodroffe's bottle genie from *Mythopoeikon* inspired Egon Bartolomeus to new heights.)

—Okay, uh huh, blue light, must go,
Bart

AGAINST THE REPRODUCTION OF DEATH



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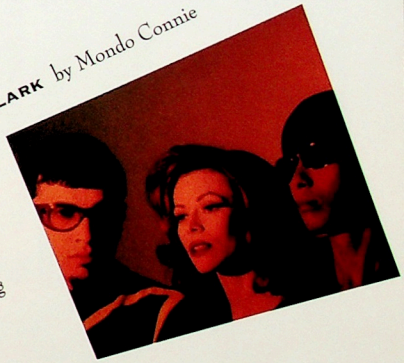

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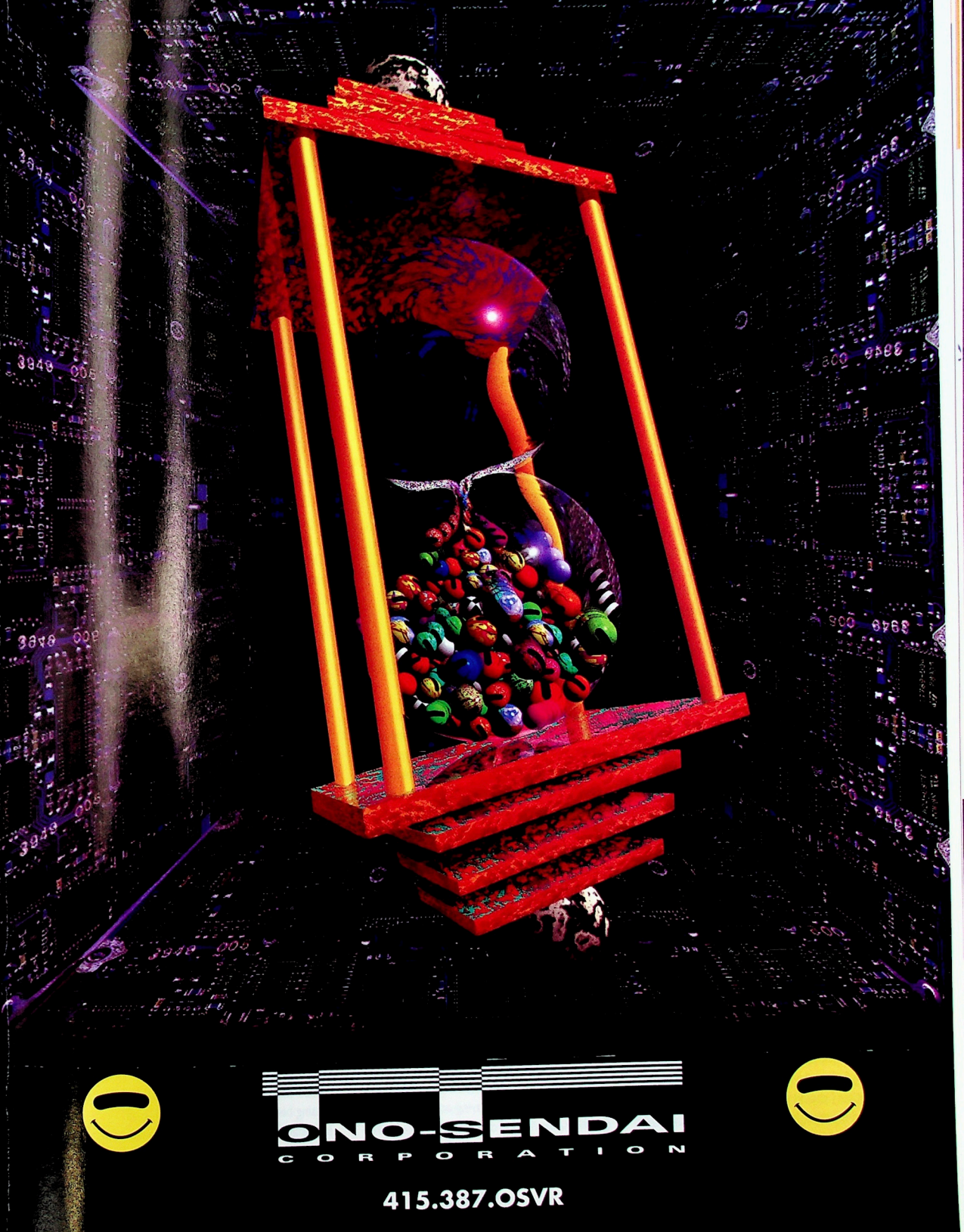
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Letters Fax E-mail

MONDO 2000,
What an amusing magazine: It seems filled with penises!

Oh, by the way, PLEASE CANCEL MY SUBSCRIPTION NOW AND REFUND THE DIFFERENCE.

Thanks for your prompt action on this.
Richard Wildanger
Mountain View, CA

Whoops! Somebody musta wrapped up the Queen's collection by accident. Just send them back and we'll happily castrate… uh, cancel your subscription. R.U.

MONDO 2000,
The nipples, nose, lip, navel and ears are tolerable, but the inside of my butt still isn't ready to accomodate his Prince Albert. I told him if he insists upon piercing his tongue we will stop kissing. I said he should read "Deforming the Envelope" [*Irresponsible Journalism*, MONDO #6] and realize what a beautiful boy he is.

Good Day, St. Jude.

MONDO #6 is a healthy dose of candy-colored adrenaline. I am a Photoshop kindergartner and I am inspired by the lush man/flower on page 4.

Fred
H-Gun Video
Chicago, IL

Dear MONDO?
To the love of all peoples in this love I love you. All the passengers of the peoples who boarded the wrong bus taking a trip to a place called earth now have exit granted engines revving. I read breathe the words place info red type stuck to my core connection. Balls to print anything from mental state only saved jesus saved your public nation an all open ear to hear. I'm inspired by the others brothers and sisters who feel the sensation of hot chocolate by a fire in a cabin winter snow cuddled with a pulsating rhythm of the heart soul occupied loved other being fuck buddy. Personal ally faced with weather I should publicly display on processed wood my thoughts of engaged intercourse with the electric cord of future cycle intelligence. Should we have a child Me ask over repeat over in me brain. To taste the milk of a mother's breastnipple homemade ultimate pleasure. Milk mono sodium glue to mate tastes great lovely titties. In virtual space taste is weeds in frames of stored lost wondereality. Keep the gospel of Spit Love. The merging of bothentrance is the key to a future smile. MONDO open arena creates stimuli uncensored and bleeding. This is asshole plugged electric socket rush up spinal tap sucked by a big beautiful companion faxed and ready to transmit. If all are online off line citizens on line acrobat live in the trees! Picking

mangoes dripping down my throat licking the sweet juice from the neck of mysoulpartner. Computed both ways. Negotiated by process remember there is such a thing created in the productive fivtees all american processed cheese singles spread from hand to mouth.

I love u love you for what u do to the shades of blue.

Long Live OBO
Uma is goddess
Kato
Human Being
Ad Minister of Spit Love

Yes, we're all subject to rapid mood changes in these trying times. Thank you for sharing. R.U.

MONDOids:
Gotcha! Operation Mindfuck is so effective that it prevented its own inclusion in the Conspiracy Top Ten, leaving only a tantalizing gap in position #8. For the curious, we have made arrangements with the Dealy Lama to authorize the release of the missing information, as follows:

8. Operation Mindfuck [up arrow]: Free agents, successor conspiracies to the Illuminati. High technology enables successful conspiracies of one. Notable members include:

- John von Neumann: wizard of game theory
- Timothy Leary: deprogramming promoter
- R. Anton Wilson: Illuminati tattle-tale
- Madonna: Earned her Pope Card
- MONDO 2000
- Your name here

Gracie, Synergy & Zarkov

P.S. Did anyone notice the domain error in Nick Herbert's slick *gedanken* experiment? There's something fundamentally unconvincing about a "proof" that depends on an undoable "experiment." An analogy, however charming (and well-illustrated!) is not an experiment. Knights and Ladies cannot be assumed to behave like subatomic particles. Until demonstrable in 3-space, this story remains in the realm of speculative philosophy, not experimental physics.

Dear MONDO 2000,
I'm writing in regards to the "direction" your magazine is taking. Every time I read an issue of MONDO 2000 I cannot help feeling like I've missed the cybernetic boat. I'm ultimately thankful that I am not aboard your boat for it is floating in a *Virtual Void*, completely unmoored, with no substantial roots of any kind. Your flippant elitism, as evidenced by page after page of nebulous, smart drug induced prose, attempts to mask your basic ontological ignorance of human evolution, psychologically, philosophically and spiritually. The smart drugs you editors are popping have only made you into *smart asses*. Every page of your rag smacks of a callow betrayal of aesthetic, literary and philosophical integrity. You surf the frontiers of new consciousness like self-satisfied Babbitts tossing beer cans and rudely clicking off Instamatic portraits. It's a tragic situation that your magazine is regarded as the clarion call

KENDRA DODSWORTH

that is ushering in the bi-millennium. How can anyone take your cathode journalism seriously? R.U. Sirius? Yes I am serious. You really have no sincere intention of enlightening or edifying your readers. You lack the capacity of vision in order to do so, for there is no virtue in your virtual reality. Why don't you start addressing the crucial political/economic and social issues at hand instead of indulging in this infantile escapism.

Seriously,
Jaye C. Beldo
St. Paul, MN

"... self-satisfied Babbitts tossing beer cans and rudely clicking off Instamatic portraits." Sounds like a plan! R.U.

Dear People,
Enclosed is a response to your author Queen Mu's article "Orpheus in the Maelstrom" [MONDO #4]. Since the article presented an extremely one-sided view of the film, Jim Morrison and Oliver Stone, I felt strongly compelled to present my understanding of the facts.

As well as being record producer of The Doors albums, I was a constant friend of Jim Morrison's and today maintain active friendships with the living Doors: Ray Manzarek, Robby Krieger and John Densmore. Having been witness to the events, I feel compelled to clarify several errors of fact and inference in the article.

Queen Mu decries the revisionism of the film, but the real source of the problem was Jim himself. Morrison, you see, was constantly rewriting the life of Morrison. Jim joyously created hundreds of fictional Jim-elephants for countless blind men (and a myriad of blind women) to behold as Truth. There are so many conflicting accounts that, as any one of the dozens of researcher/biographers has learned, telling the definitively accurate Morrison story is a hopeless task—*Jim wanted it that way*...

My favorite section of the Queen's article occurs when she (I must confess at this point that my best guess is that Queen Mu is male; certainly the writing is masculine regardless of any natal accident to the contrary) presents the thesis that in 1970 Jim was diagnosed with "adenoma of the penile urethra... a particularly swift form of cancer whose only alternative may have been radical castration." From this The Queen hypothesizes that Jim, seeing death's face approaching, chooses a slow suicide via Tarantula Hispanica venom, possibly turned on to it by Bob Dylan. Q.M. also claims the "cancer" to be the inspiration of the "death of my cock" poetry from "The American

Queen Mu/Torquemada

Night." Now, dear reader, THIS journalistic high-wire act is a real piece of work...

I am, to say the least, helplessly amused by The Queen's fascination with Jim's cock and her own humid mythic revisionism based on Jim's over-explored member.

In her attack on Stone's beliefs, Q.M. says, "I just wonder what a good Jewish boy is doing saying," then quotes Stone, "there was a Jesus quality about Jim." I must point out that accuracy would have to require the phrase "good half-Jewish man." I, as a fully Jewish man who has loved and made a life-long study of the teachings of Jesus, am deeply offended by Queen Mu's un-Christian backhanded bigotry.

I'm not quite clear what Q's article is really about. It parades as a piece about Jim Morrison and film, but over 70% of the writing is dedicated to a sophomoric syllabus on drug abuse by history's literary-rich and kamikaze-famous. How embarrassing, in this age of clean and sober, for a writer to exploit truly creative talents like Morrison and Stone in order to promote her pathetic love affair with drugs. I too read the ancients and abused drugs in the 50's, 60's and 70's; frequently with Jim. But Queenie, it's the 90's—get a (contemporary) life.

Men like Stone and Morrison take pride in signing their names to their controversial works. Queen Mu, in fear or shame, must sulk behind a nom-de-wimp. For her future "star-chamber" articles, might I suggest she sign them, Queen Torquemada.

As I read Q.M.'s work I was repeatedly reminded of the 19th Century French composer/critic Hector Berlioz's reply to a published attack on one of his compositions: "I am seated in the smallest room in my house. Your article is before me. Soon it will be behind me." Amen.

Paul A. Rothchild
Music Producer of *The Doors*
An Oliver Stone Film
Los Angeles, CA

Paulie. Nice to know that you're down with the Perrier generation. But remember this: "When all else fails, you must whip the horses' eyes and make them sleep and cry." EXCELLENT!!! R.U.

To Whom It May Concern:
MONDO 2000 has donated two copies of their magazine and a complimentary subscription for the inmates of the Fort Worth Federal Correctional Institution in Fort Worth, Texas, through the Inmate Library.

Dear Everyone at MONDO 2000,
I got both issues you sent and have meant to write to you sooner but the mags went out so fast and got passed around that just yesterday I grabbed one to get your address so I could address this letter to thank you for your generous donation. Everyone really likes it and it's being read by some of the men whom I never thought would get into it. So there!

We have some guys here that were involved with computers on the street and we're seeing more and more people coming into the "system" for crimes committed with a computer. Welcome to the 90's; Kindness and

Gentleness, strictly enforced, whether you like it or not! We aren't, as a rule, given access to the computers here at the institution. I wonder why?

Anyway, thanx for the copies and I hope you've put me down for a "Comp/Donated" subscription because you have some avid readers here now.

Regards,
Stacey Apple
Fort Worth Federal
Correctional Institution
Fort Worth, TX

Dear M2,

Down with the Cyberjunk! House music is the moronic pap of the hard of thinking. It is an IV drip of mindlessness, euphoric images and sounds concocted to tickle the users of the brain drug, TV. The Nintendo Generation stares at it blankly, seeing no message (for there is no message to see), spittle sliding slowly off their lips. At least Rockers fucking move when they listen to their music. They don't just sit there like lobotomy patients or lithium fiends!

F. Buck

P.S. Hey Mau Mau! What happens when you key the penis ring? I'm afraid to try.

Ravers don't just sit mindlessly watching TV screens. They dance mindlessly, till dawn! R.U.

Dear MONDO,

I KNOW you're anxiously awaiting another of my excellent articles, but PLEASE be patient.

In the meantime, I'd like to say AMEN to fellow Mondoid Johanne Blank [*Schweppes Bitter Lemon letter*, MONDO #5], who recounted difficulties in obtaining this learned journal in Ohio. I have rarely/never seen MONDO on the newsstands, even at those locales where you wound [*sic*] expect it. I've learned therefore, to B.M.O.M. (Bring My Own MONDO) on trips and other occasions.

Recently though, while strolling the fair (all senses) city of Wellington N.Z., I was antipodeanly pleasantly surprised to see MONDO at EVERY newsstand. In fact, some stores had it on "showcase" display in their very front windows!

Congrats to those fine folks down under, and to you.

Hy Chantz
Brooklyn, N.Y.
(P.S. Paradox, eh?)

To Whom It May Concern,

With regards to the "Psychotic Errol Flynn" from last issue's letter column, I feel the need to expose this individual for what he is. First off, it is now known that this person is responsible for the poisoning of several prostitutes in the Cass corridor. What other reason would the police have to make this neighborhood a "police decoy area?" Deny it all you want Errol (or is it Ho Ho?), we have found all of the evidence needed to have you convicted in the dumpster behind Parker Market. Our operatives have had you under surveillance for several years now, and we now know that your affiliation with the shrine of the black Madonna is indeed a hoax. Yes indeed, you overgrown tattooed leprechaun, we know for a fact that you have been having sexual relations with your rottweiler for the past three weeks. YOU CANNOT DENY THIS! Don't think that shaving your beard has fooled us, we have been monitoring the activities of your many sexual partners for years now. WE NOW KNOW ABOUT YOUR IMPLANTS! I implore MONDO readers everywhere to take heed of this, and spray paint "Death to Ho Ho" on freeway overpasses in their hometowns so he will know that the populace has been informed of his evil schemes.

No smoke, No blue dye,
Rev G.X.M.
Sconi Down
Detroit, MI

MONDO 2000
(Pantheon o' free thought)
Attn. Mondoids

It has come to my attention, through Xandor Korzybski, that I am not alone in what I previously thought to be my own paranoid delusions.

Listen—time is short before the gray alien-designed machine, which includes, first and foremost, the entire Bush and Yeltsin conspiracy for worldwide control (via gray alien mind destruction, which comes at us through television, the prime demon, and also by the lies sprouted by alien-puppet Bush) takes over the entire world so that the whole human race may be enslaved as cattle by the gray aliens. **Beware** a hideously prophetic and Orwellian New World (Dis)Order. **Beware** conservative mind puppets (such as any authority-pig attempting to censor our thoughts).

TRUST NO ONE, especially bought-out government officials. The filth-puppets that have taken it upon themselves to control our lives via what media we receive have created such monstrosities as the SDI program, AIDS, and Chernobyl in order to enlist, as Xandor explains, worldwide panic so that the dreaded FEMA (rights-loss) program may be put into effect. I do not have the time or space to go into the depth of these revolting developments in the eventual enslavement of mankind, as I am under alien observation as I write this.

Take action,
<Alpha/Omega> Baker (HNB)

HY CHANTZ

Dear Mondoid implantees:
OK, after $1/2 billion in damage, 1700 fires, 100,000 hungry armed jobless crackhead gangbangers roaming the burned out city, mass imprisonment of 17,000, suspension of constitutional rights of habeas corpus (right to appear in front of a judge) and freedom to assemble and bear arms, and open talk of CCC-like work brigades (slave-labor), all as I predicted in previous letters, maybe you assholes are ready to listen to Xandor and take action, eh?

Now let's cut the bullshit and get it straight: THE L.A. REVOLUTION WAS PLANNED AND ORGANIZED AS A PRETEXT FOR INVOKING EMERGENCY POWERS TO CONDITION EVERYONE TO ACCEPT LOSS OF CONSTITUTIONAL RIGHTS AND ULTIMATELY TO JUSTIFY THE NEW WORLD ORDER TOTALITARIAN FASCIST-SOCIALIST STATE AND GENOCIDAL POPULATION CONTROL. It was well rehearsed in California's Garden Plot and Cable Splicer covert ops under Jesuit agent-turned-Gov. Jerry Brown, targeting destruction of black and brown peoples and their property and jobs and intended to incite to riot, thus justifying crackdown by authorities and mass imprisonment of dissidents. Here's their strategy:

PHASE 1: DISINTEGRATION. Create mass unrest and vulnerability: offer welfare, then remove, arm them, flood area with drugs, disintegrate education and families, inoculate "undesirables" with covert HIV, deny aid to destroyed cities and resulting homeless, demoralize, and turn public opinion against them to create mass hysteria and anger.

PHASE 2: DESTROY A CITY. Federal agents-provocateurs drug Rodney King, have police chase and torture him, feed video to networks, manipulate jury in Reagan-controlled seamy valley, light fires, stir up rebellion, provide snipers to deter fire fighters, allow free-for-all looting and burning, including all weapons stores (thousands of powerful new weapons now available to rioters). Symbolic manipulation of mass psyche: whipping of dark-skinned species, Rodney King chosen for his M.L. King namesake and Rod-King biblical/sexual symbolism. Metaphor: ruler (Reiner) storms gates (Gates) of city to rescue King with his holy rod; fails, resulting in thrashing (General Thrasher, heads National Guard). Appeal to deep fear of black (their own repressed) sexuality: Mandingo (African slave) attacks white policewoman (baby-talking-lisping Sgt.

Coon's memoirs) and Buchanan's statement—"orgy of looting, torching, murder, hooliganism"—1/2 hour before Rodney King press conference. Chose May Day to stimulate unconscious fears of symbolic communist revolution while increasing energy of rioters. Intelligence operatives Gates and Bradley, along with governor, programmed or drugged into total passivity (did you watch these zombies mumbling incoherently on TV during the riot?) and inaction (National Guard obviously intentionally not called in by Gates until 24 hours after the holocaust), President Nero jerks off on a golf course somewhere while city burns. Meanwhile, CNN (CIA News Network) runs King beating nonstop and exciting action footage of Kuwait-style fires to instill fear and to incite to riot (the media is the conspiracy, not the message), followed by Population Bomb series next evening to get the genocide/population control message across. Purpose of riots: allow fires and looting to create atmosphere of fear and make it appear it's OK to revolt. Then crack down, justify state of emergency, federal troops: condition population's acceptance of stronger future repression. YOU HAVE BEEN BRAINWASHED TO ACCEPT THE POLICE STATE! WAKE UP!

PHASE 3: DECLARE NATIONAL MARTIAL LAW. Create bigger riots in other cities. Announce a terrorist group with nuclear weapon is in U.S., timed for an ELF-wave-created earthquake. Declare state of anarchy. Suspend constitution and declare martial law (under Nixon Exec Order 11490), activate FEMA emergency powers, imprison implantees (1 out of 40 people) and dissidents under federal Public Law 100-690 (Anti-Drug Abuse Act), which allows mass search-without-warrant, mental treatment (brainwashing) centers, USSR-style slave-labor prison camps, and machine-readable identity program for border crossers. Activate Mt. Weather (underground parallel government in Virginia), seize all weapons, total citizen surveillance.

This is all getting too complicated for simpleton sadist George Herr Nero Bush, who can't keep from nodding off and barfing up at dinners from Halcion sleeping pill addiction and can barely manage to engineer the S&L bailout of his son's billions, smuggle billions in drugs via his offshore oil rigs and underground tunnels throughout the country built by co-conspirator George Shultz, push Prozac to create serial murderers to justify disarming all citizens, cover up his massive BCCI/Mideast Octopus oil/drug/CIA money-laundering scheme, arrange for the murder of journalist Danny Casalero to cover up the Justice Dept./CIA role, create the October Surprise (thanks to contributions by Perot to Oliver North to buy off the Iranians to play along in exchange for illegal arms and usher in

(LETTERS continued on page 110)

ANDREW KONG KNIGHT

Of Curses and Bottle Imps

EGON BARTOLOMEUS

"The only justifiable purpose of political institutions is to insure the unhindered development of the individual."
—Albert Einstein

"Pay no attention to the man behind the curtain!"
—Frank Baum

There's that famous curse from the annals of Pop eschatology: *"May you live in interesting times."* No one seems to know if it came from Chou Dynasty China or some Ottoman caliphate, but one thing is certain: it's never rung truer.

The L.A. Riots. A thousand micro-quakes. And the Shake 'n Bake state mails out $34 million in I.O.U.s. As we teeter perilously on the cusp of the millennium, it's tempting to wallow in Old Time Values. Thus we find Norman Rockwell and an idealized small town America invoked by a presidential candidate who's equal parts Will Rogers, Hal Halbrook in *Mark Twain Tonight*, and Spencer Tracy in *State of the Union*. Here is a man who, from the lofty perch of a 30-billion dollar company, *glorifies hardship!* A man who told *Newsweek* "One generation working and sacrificing for the next—that's what it's all about!"

Queen Mu

But let's look again behind the curtain. This is a man who made his pile off the *government*. A man with total entrée at the White House. A man who groks data control—or just *Kontroll* (we call it the "first initial syndrome"). A man conversant with the highest technology. A man uniquely equipped to lead us into a new era of infinite prosperity and digital elegance, of two day work weeks and a platform on every desk. And he's telling us we have to put Nirvana *on hold?*

The digital millennium is at hand. This man could make it happen. There will be trade-offs, of course, as we make that critical transition from a finite resource-based economy to an information-based economy. It's a whole new deck and Malthusian economics went out with the East India Company. The basic swindle that keeps us all enslaved is the notion of what anthropologists call "finite good"—or, in Bucky's phrase, a deficit biotic support system. The notion that there isn't enough wealth to go around. Buckminster Fuller—a kinder, gentler technocrat—exposed this hoax in World Game.

The Old Boys Club in Washington doesn't have a *clue*. Oil, mining, banking—these are 19th century robber baron institutions. Data Management is NOW. So are satellites and surveillance. The man behind the curtain's hip to this—he's already sewn up all the prime footprints for the election.

He's the original stealth candidate—blinkless, with all the cozy charm of a cobra (Dianetics TR Zero?). We know his penchant for covert action. He's been the *de facto* Data Czar—and Arch-Fink—in this country for over 25 years. Now he just wants the formal investiture. Colson called him the slickest operator he ever saw in all his years in the White House. Fitzwater, Bush's Press Secretary, asked "When is America going to wake up to what kind of monster they're buying?" The Republicans characterize him as some kind of right wing toady turned viper-at-their-bosoms. This campaign is beginning to remind me of the famous *Ku* poison in ancient China where they seal five venomous creatures in a flask and let them all thrash it out.

Wise up, America! The new pretender is being less than candid about core issues—like what it's going to take to implement the Electronic Town Hall. We will be induced or inveigled into some form of positive personal identification. It's just a matter of time and protocols. Retinal scanning is currently enjoying a vogue in the Chicago prison system and it's Unix-based, realtime, completely automated and fully integrated with IBM PS/2s and Motorola's 3000 Delta series. At 1200 bytes of disk space for both retinas, it's got DNA bar codes beat cold as the biometric signature of choice.

We will be offered interactive bread 'n' circuses, talk show TeleVideo, digital Dating Games, and every nerd in America will get laid. Such is the power and promise of our Data Genie. And all we have to do is give up our virgin retinas.

Timothy had the prescience to foresee the outlines of this twenty years ago. Our native Orwell, our native Huxley even—his vision was uncanny. He said it then: "Any politician who runs for office on the platform that he's going to do everything he can to take power away from the politicians and return it to the people *is going to ride a powerful wave.*" Take heed all good citizens and remember: Hitler was an alternative candidate. Do we really want a benevolent dictator whose solution to the "drug problem" is another *Kristallnacht*?

Make no mistake: we are in the midst of a military-industrial *junta* in this country. Only the *industry* is data management and *"they"* are "we." The Old Boys Club, with their drug runners and munitions dealers, are in rout. The military and the computer industry are hand-in-dataglove. It's wholly possible that a legion of techno-nerds will carry our pretender into the White House on their shoulders and that his appointment will be ratified by the highest court in the land: Television.

At that point he will have to deal with what Timothy has called "The Curse of the Oval Room": *"It is one of the many paradoxes of power that it can never be safely bought."*

Timothy is a career optimist, a self-confessed hope-fiend, and a believer in the grandeur and ultimate success of the human neurogenetic experiment. There's a new generation of kids at the controls—supple, wily, resourceful. The untrammeled intellect is our greatest asset. With a cosmology as rich and weird as we now know it to be—as colorful and chaotic—do we really want to exchange *all that* for corporate spreadsheets and interactive TV? And do they really expect us to trade in our virgin retinas for a mess of digital pottage?

Stay tuned!

The Return of Individual Sovereignty

BRUMMBÄR

Timothy Leary

It was twenty years ago today and Timothy Leary was on the lam consorting with intellectual outlaws in Morocco or glitterati and Eurotrash in Switzerland. By '73 he had been roped in once more—to the Black Hole of solitary confinement at Folsom Prison. Prison provided a clear perspective. There, in the dim light, he wrote "a complete systematic philosophy: cosmology, politic, epistemology, ethic, aesthetic, ontology, and the most hopeful eschatology ever specified." Here is an extract from Neuropolitics *which remains as blazingly true as when he wrote it.*

—Queen Mu

October 1973, Folsom Prison

The challenge and glory of techno-neurological democracy is this: society can no longer allow one person to feel abused, persecuted, ignored. Everyone must understand how the open neural network works and have access to it. Listen. Last August I was invited to dinner by an influential Swiss politician who said he could arrange for political asylum in his canton. He was a secret sexual dissident, his apartment a cozy culture cave, walls lined with classical albums, and upholstered with leather-bound, never-opened books. My host cooked and served a gourmet dinner. I sat at the head of the table drinking wine, listening to six businessmen explain why Switzerland should vote "yes" on the referendum to authorize the manufacture and sales of arms. "It's not the money, it's the market principle; if the underdeveloped countries want to buy arms why shouldn't we profit." Etc.

I had been shooting screen tests for the role of Harry Haller in the film production of Hesse's *Steppenwolf*.

Then the party fell to discussing the shoot-out at the Munich Olympics. Everyone clucked and shook their heads.

I was totally programmed by the Hesse-Haller script. You remember the bust-of-Goethe-scene? Haller tells the professor that he is a drunken, outlaw philosopher unfit for social appearances. Unhappily none of the dinner guests had read *Steppenwolf*. It's so untidy when the other actors don't realize that we're playing out the classic script, almost word for word.

I recited the Haller-Hesse lines:

"Munich, my friends, is neither good nor bad. It's an inevitable, undeniable symptom. A meteorological sign. *Too bad* that ten men were slain, the games disrupted, and the very word "Olympics" now and forever associated with political despair. Will the lesson be learned? The same week a thousand peasants bombed to death in Vietnam, half a million Pakistani-Bangladesh rot in prison camps, while the affluent gather in Munich to play flag-waving contests for national prestige. The lesson of the Munich Olympics is that in this technological world as long as any one person hurts or even believes that he hurts we have to stop games-as-usual and pay attention to the wounded member. Life on this planet is one living organism and the pain of the smallest cluster of cells can cripple the whole. Hijackings, electronic sabotage, crime waves, biological-germ guerrilla coups, are the initial symptoms."

The Control People realize that a highly technological society requires total coöperation and docile obedience of the citizenry. B.F. Skinner speaks for the authoritarian technocrat advocating a control beyond human freedom and dignity. Skinner's system for conditioning children requires total control of reward-punishment and complete secrecy about the methods involved. Therein lies the vulnerability of totalitarian mind control. It pivots on total secrecy and unanimity. *One* dissident electronic-media expert, *one* libertarian psychologist can jam the system. This is, of course, why I am the prototype *Sci-Fi* prisoner in America.

I'm walking on the prison yard with Wayne, who asks me about the lesson of Watergate. I tell him that we are going to replace representative government by proxy and substitute electronic voting. Every citizen registers his or her signal. Wayne's a realist. He shakes his head. "Of course, it's the only solution, but it's too far out. It will scare people." I tell him that it's not so new. The stock market works on exactly that principle. Continual votes of confidence. Ongoing registry of opinion. Tell people they all own an equal share in the government. Wayne shakes his head. "Keep thinking." (People would be surprised at the level of prison conversations. All I ever hear are discussions about the great political and philosophic questions *and* their solutions.)

Okay, how about this? There is one thing that every American agrees on. The dishonesty and incompetence of politicians. Any politician who runs for office on the platform that he's going to do everything he can to take power away from politicians and return it to the people is going to ride a powerful wave. The number one issue is the inability of government to govern. A new constitutional convention charged with the responsibility of creating a governmental structure which utilizes electronic expression of individual opinion will get the country alive and laughing again.

The glory of electronic technology and scientific culture is that they operate according to laws of nature and cannot be permanently captured by the artificial laws of politics. The medium is the evolutionary message. Language, thought and custom are becoming electrically energized. Science and technology cannot be controlled by a national leader or restrained by national boundaries. Those born into the electronic culture will soon learn how to govern themselves according to the laws of Energy.

Platitude tells us that Nixon will never recover from Watergate. Neither will the country. Competitive politics is dying. The secret is out. Tap our wire any time you want, Liddy. We're broadcasting for you, too. We've got continuous power output, direct coupling, audible spectrum, low noise transmission, high circuit reliability, superb capture rate, excellent selectivity. If we had known you were hiding out in the palaeolithic bushes we would have invited you to tune in. It's the new Hi-Fi, Psi-Phy, polychromatic, multi-channel, cyberdelic, fiberoptic trancemedia planetary network and we're all linked up love.

Reprinted from Neuropolitics: The Sociobiology of Human Metamorphosis *by Timothy Leary with Robert Anton Wilson and George A. Koopman. A Starseed/Peace Press Publication. Los Angeles.*

[SIC!]

New Decordings from Sweden

We MONDO staffers want to think of ourselves as counter-cliché agents, as combatants on the neologistic front line. We regret that we've been Edged out by CM [sic] von Hausswolff of Göteberg, Sweden. We are reproducing faithfully, even worshipfully, his press release for Anckarström Records:

ANCKARSTRÖM
Stelarc
ZBIGNIEW KARKOWSKI DROR FEILER THE HAFLER TRIO ADI NEWTON THE SONS OF GOD
JOHN DUNCAN IF BWANA•XTSW STELARC PHAUSS ARCANE DEVICE WHITE STAINS

Artist: **Stelarc**
Title: **Stelarc**
"'...is it a bird... is it an aeroplane... is it a flying fish... is it an unidentified flying object? No it's Stelarc hanging naked 60 meters over the ground in hooks and electronics...'"
This is Stelarc's debut as a recording artist!

Artist: **Zbigniew Karkowski**
Title: **Uexkull**
"Renegade thrasher and defiler of evil minds polarises the cells of the room with this special brand of (de)compositional mayhem and love."
Earlier released records and pieces:
Bad Bye Engine
I Fell in Love...
Under the Spell of Zombie Agressor
Masturbatorium

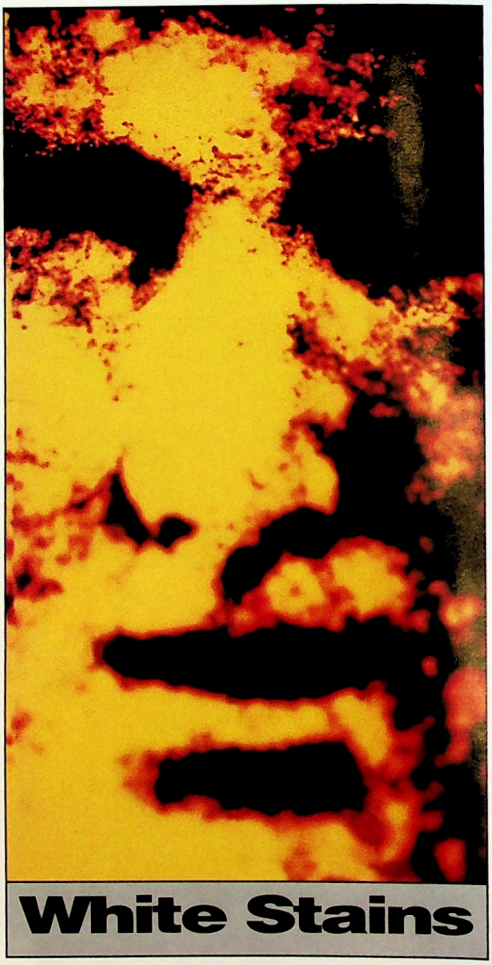
Artist: **John Duncan**
Title: **River In Flames**
"This kicking exemplary cultural terroriste terriblé and pirate of the high frequencies dismembers the senses of the audience by means of a battery of devices and sounds from the brink of his own being."

Artist: **Dror Feiler**
Title: **The Celestial Fire**
"Eye-bleeding ultimacy and eruptive lung-outs mixed with intifadic kosher and aestetic head-banging."
Earlier releases: Several LPs and CDs with freejazz group Lokomotiv Konkret and The Too Much Too Soon Orchestra

Artist: **The Hafler Trio**
Title: **The Hafler Trio Play The Hafler Trio**
"Mastery of soundarchitecture and relocation-decordings plus a great dollop of the perfumes of rampant sexual desire."

Artist: **If Bwana/XTSW**
Title: **R.ISMV.1**
If Bwana/XTSW is mostly Al Margolis. Works and lives in Brooklyn, N.Y.
"Hey, mister... ever heard of a Pig leaving the centralstation after midnight finding himself all packed up in a slowmotion newsreel all ready to re-educate the New York City Symphony Orchestra?"

Artist: **PHAUSS**
Titile: **Nya Sverige—Nothing But The Truth**
PHAUSS is CM von Hausswolff and Erik Pauser. Lives and works in Göteberg but not for so much longer.
"The two-some with the mostest fills the gap between cultural dissemination and life after breakfast proves that tourism is not the be-all and end-all."



Artist: **White Stains**
Title: **The Somewhat Lost Horizon**
"The execution of occultural sophistication and samplerised magickalisation... the aesteticks of astma... the eticks of feeling free to feel free." M2

Artist: **The Sons of God**
Title: **Mission**
"The Sons of God put themselves at the disposal of civil defense and strive to imbue fortitude and courage. Living legends in their own lunchtime."

Rex Nebular is on his way!

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1-800-879-PLAY

Plugged in, No wires

"Mobility is nobility" —Timothy Leary

Here's a peek at how you'll work and play in the wireless mobile computing future. Most of these gadgets are available right now. A lucky few people are already using them. Now just look into this crystal ball...

You're on Mt. Shasta and it's time to go back to the world of work. Do you drive for hours and strap yourself into an ugly office with dreadful people for eight hours?

No way. Your personal pocket SkyWord pager is monitoring the 931 MHz band for a satellite signal relayed through thousands of SkyTel transmitters around the U.S. and Canada, waiting to display an 80-character message from any computer in the world. And store 30 such messages. You're on the wireless grid.

THE PAGO PAGO DOWNTOWN OFFICE COMPLEX

Does the sender or the paging company need to know where you are? No. Do they care? No, as long as you pay the $75 to $99/month for equipment rental and 50 messages.

This is freedom. No more calling in for scrambled messages. No more stupid meetings. My kind of world. A sort of reverse Big Brother—*you* get total access to everyone else and you do it where and when you *damn well please*. Mobility is nobility, as Leary put it.

Wes Thomas

Of course, if you've got an attention span of more than a sentence, you may want to move up to SkyTel's next tier. SkyTel Link lets you use the SkyWord pager to receive 240-character messages sent from a computer via modem or via AT&T Mail (a national email service that lets you call an 800 number to hear a synthesized voice read your computer messages to you—*neat*). And it also has a serial cable that plugs into the nifty but pricey NCR Safari laptop (or others, in the near future, I'm assured) so you can review your messages any time.

OCS ON THE WIRE

But why stop there? Motorola has invented the ultimate gadget for obsessive-compulsive email-infophiles like me: the tiny 3-oz $300 NewsStream receiver, which snaps onto the $799 Hewlett-Packard HP 95LX palmtop and feeds it 240-character email messages.

You can also feed in the latest news and updates to the palmtop's built-in Lotus 1-2-3 spreadsheet, phonebook, filer, organizer, or palmtop calendar. For that, you'll need Notify! from Ex Machina for Macintosh (PC version planned).

Your caller can send you info via Notify! from HyperCard stacks or various alarm and email packages. It can even retrieve stock quotes and other information from CompuServe (using a MicroPhone II communications software script) and other services.

Don't expect to write a novel on the 95LX's tiny keys, but it's great if you just want to access bits 'n' pieces of info. You can also get ACT!, an integrated contact management application that's easier to use than the built-in organizer and lets you update your Mac or PC database on your base station back in your mobile home or (if you must), yuk, office.

UH OH

Oh, I forgot. To use the NewsStream, you'll also need to subscribe to a paging service. No one said the future was simple. You've got two choices.

SkyTel's SkyStream works from over 200 metropolitan areas in the U.S., plus parts of Canada and Mexico. People sending you messages can use their communications software (no special email service required, but you can also send messages from AT&T Mail). That will set you back $36 to $72/mo. You, the receiver, pay—the sender doesn't. (What will happen when the junk email people get your pager number? So don't give it out.) You'll be able to access business or world news, RSN (real soon now).

There's also Motorola's EMBARC paging service, which charges $395 for the NewsStream receiver, laptop software, and mailbox signup, plus $15/month and per-message fees. This service will be available RSN in 70 U.S. metropolitan areas (more will be added, plus Canada by year end, I'm told).

The bene here is larger messages—up to 1500 characters per message—and compatibility with any laptop, notebook, or palmtop. Its laptop/palmtop software also lets you send a message back to the sender (using your modem and standard phone lines to their central computer) and check what messages have been sent to you or get the current news from *USA Today*.

MIND IF I PLUG THIS IN HERE?

Both of these services are very cost-effective for broadcasting (sending to multiple recipients), which is about the same cost as sending to a single recipient.

Of course, if you're a certified email junky, you won't want to be confined to terse one-way messages. Or have to send messages back via telephone. And you know what that means when you're traveling: groveling for an RJ-11 jack, figuring out how to access a PBX, or randomly ripping telephone wires from walls, as I am wont to do when I'm desperate for my email fix.

Yes, there are some laptops around with 2-way cellular modems, but these tend to be unreliable. That's because our pre-digital-world cellular phone system uses a sort of honeycomb of cells. Even when you're standing still, your signal can get handed off to a transmitter for another cell—most modems can't keep up with this sleight of hand. A new generation of digital cellular telephone systems coming RSN that will fix all that.

In the meantime, 2-way radio modems with packet-radio networks, which transmit data in packets (short bursts), overcome the problems of cellular telephone networks. There are two services available, and both let you access your base or office personal computer, LAN, email service, or mainframe directly.

WRAP IT UP, I'LL SEND IT

ARDIS from Motorola and IBM is a 4800/19,200 baud national wireless packet-radio network that works just about anywhere (even within downtown buildings) in over 400 metropolitan areas in the U.S. and Canada. You can access it with a laptop equipped with a Motorola radio modem, priced at $1600 to $1700. The service is billed per-packet. (A 100-character message is 12 cents.)

The modem is being built into laptops and palmtops, like Poqet Computer Corp's new $4995 PoqetCom. A communicating version of the popular Poqet PC palmtop computer, it includes a standard 9600-baud modem for conventional telephone access and comes with 640K of memory, DOS in ROM, typewriter-style keyboard, and full 80-character by 25-line display. It accepts 2 storage cards holding up to 4 MB each.

RAM Mobile Data is a newer national packet radio network that costs $25/month plus a per-message charge (5 cents for 100 characters, for instance). It works with the more accessible $1795 2-way 8000 bps Mobidem radio modem from Ericsson GE.

This neat under-1-lb gadget is about the size of a small cellular phone and connects to a palmtop or notebook for 2-way email access in 35 metropolitan areas so far (it's expanding to 100 by next year, the company says).

THE 2-WAY WRIST MODEM

Hewlett-Packard is looking at a future palmtop that will have this 2-way radio capability built in. Clain Anderson, Hewlett-Packard's resident futurist and product planner, demoed me the Mobidem hooked up to his HP palmtop at COMDEX in Chicago in April. Tapping a few keys, he sent an instant wireless message via MCI Mail to a colleague in Oregon. I was impressed. I wanted to grab it and run, but he has my email address.

For this trick, you need a gateway—a service that connects email services to paging carriers and 2-way packet-radio networks, routing messages automatically to your laptop, palmtop, or alphanumeric pager, or vice versa—back to an email recipient somewhere.

RadioMail from Anterior Technology communicates between most email networks (including MCI Mail, AT&T Mail, CompuServe, AppleLink, USENET, and Internet, and paging carriers, such as SkyTel, as well as packet radio networks, such as RAM Mobile Data and ARDIS. Subscription is $35 for setup and $20/month (more for 2-way service, typically $100 or more a month).

PSILink from Performance Systems International connects to

the same networks. Subscriptions for 1200/2400 baud service are based on a flat-fee of $19 or $29/month, depending on service level, and $29 or $39 for 9600/19,200 baud service.

INTO THE INTERNET!

Both of these services give you an Internet address, which links you up to lots of researchers, hackers, and others around the world. PSILink also tells me you can use their service to send "free" email to email subscribers on MCI Mail, CompuServe, etc. In other words, you can access millions of email users without having to subscribe to each service. Sounds like a plan.

But if you want the ultimate 2-way wireless gadget, you've got to fork out $10,000. For that, you'll get access from anywhere in the world, guaranteed—even the north pole. Remember that suitcase-sized satellite terminal used by Peter Arnett in Baghdad? That was CNN's secret for scooping the world. Arnett didn't need to rely on a studio in a truck or hotel telephones. He just snapped open that tiny umbrella antenna and he was *instantly* talking to Atlanta.

Mobile Telesystems, the maker, has come out with an even smaller unit for data only. Its data-lite is a 13-pound 600 bps satellite terminal using global-coverage INMARSAT-C satellites. It includes an HP 95LX palmtop and PC software for laptops or notebooks. You can communicate with another data-lite user or email users around the world via the telex network (which connects to MCI Mail and other "X.400" carriers) or any fax machine (via Germany-based GeoNet). I want it.

That concludes our tour of wireless systems you can go out and buy today, or RSN. What's next, you ask? A few bullets:

• VIRTUAL EMAIL

Your workgroup associates stuck back in the office will send you messages via Lotus Notes on a local area network, but they'll be routed to your SkyStream receiver and displayed on your HP 95LX palmtop at the beach. They'll think you're slaving in your office, poor wretches. (Send them return messages via modem and phone).

Newton

Transporter is a program coming out RSN from Market Contact Software. It will automatically route information and messages to your pager, email service, or fax machine, wherever you tell it you are.

Go Corporation's PenPoint operating system for pen-based computers will take it a step further in simplicity. Just point to the outbox with your pen to send a message from your mobile pen-based computer—messages will be automatically routed by fax, email, or network, depending on the recipient. Incoming voice pages will beep and display the caller's phone number on the computer screen; messages will go into your inbox.

• INFRARED WIRELESS NETWORKS

If you're stuck inside an office, you might at least have the freedom to move around. Photonics' Infrared Transceiver uses infrared light to provide ad-hoc wireless networking for collaborative computing. Look for this to show up in laptops and notebooks RSN. It works over a 30 x 30 foot area as a 1-megabit-per-second local area network.

I saw a early version of this at COMDEX running a prototype Windows program that lets users share text and drawings among multiple pen-based systems, providing a kind of shared electronic blackboard for meeting participants. You could write or draw with a pen and have it repeated on other tablets. Wireless graffiti?

• PERSONAL DIGITAL ASSISTANTS

New wireless pen-based "personal communicators" are in the works, such as Apple Computer's tiny Newton "personal digital assistant," due out in early '93, which will accept freeform handwriting, magically interpret what you write or draw, organize it into calendars, faX messages, etc., and even let you zap a message to another Newton user in the same room.

And Motorola is planning to launch its Iridium global communications system in 1996, using 77 satellites to provide low-cost worldwide 2-way communications from handheld devices.

• IMMANENT COMPUTING, LIKE THE MIND OF GOD

Xerox Parc researchers believe computers will vanish in the future. They'll be imbedded in hundreds of low-cost pen-based devices per room, such as "tabs" (Post-It-size memo pads) and "pads" (high-resolution page-size devices)—all communicating with one another and with devices in other rooms and everywhere, linked by high-speed infrared and local/global radio networks. Datasphere! M2

Products and services mentioned:
Anterior Technology: (415) 328-5615
Apple: (408) 974-2042
ARDIS: (800) 992-7347
EMBARC: (800) EMBARC4
Ericsson GE: (201) 599-4244
Ex Machina: (800) 238-4738, (718) 965-0309
Hewlett-Packard: (800) 443-1254, (503) 757-2000
Mobile Telesystems: (301) 590-8500
Poqet Computer: (408) 982-9500
PSILink: (800) 82PSI82, (703) 620-6651
RAM Mobile Data: (212) 373-1938
SkyTel: (800) 456-3333

Futurist Wes Thomas is publicist for MONDO 2000 *and other leading-edge entities. He carries a Poqet computer everywhere and stays in touch by MCI Mail (224-4194), CompuServe (72767,1245), America Online (Wthomas), and AT&T Mail (westhomas).*

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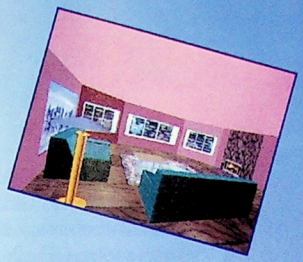

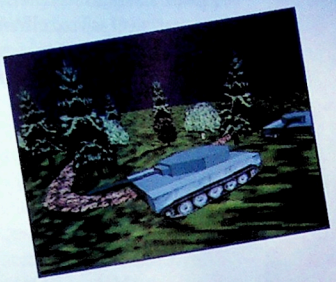

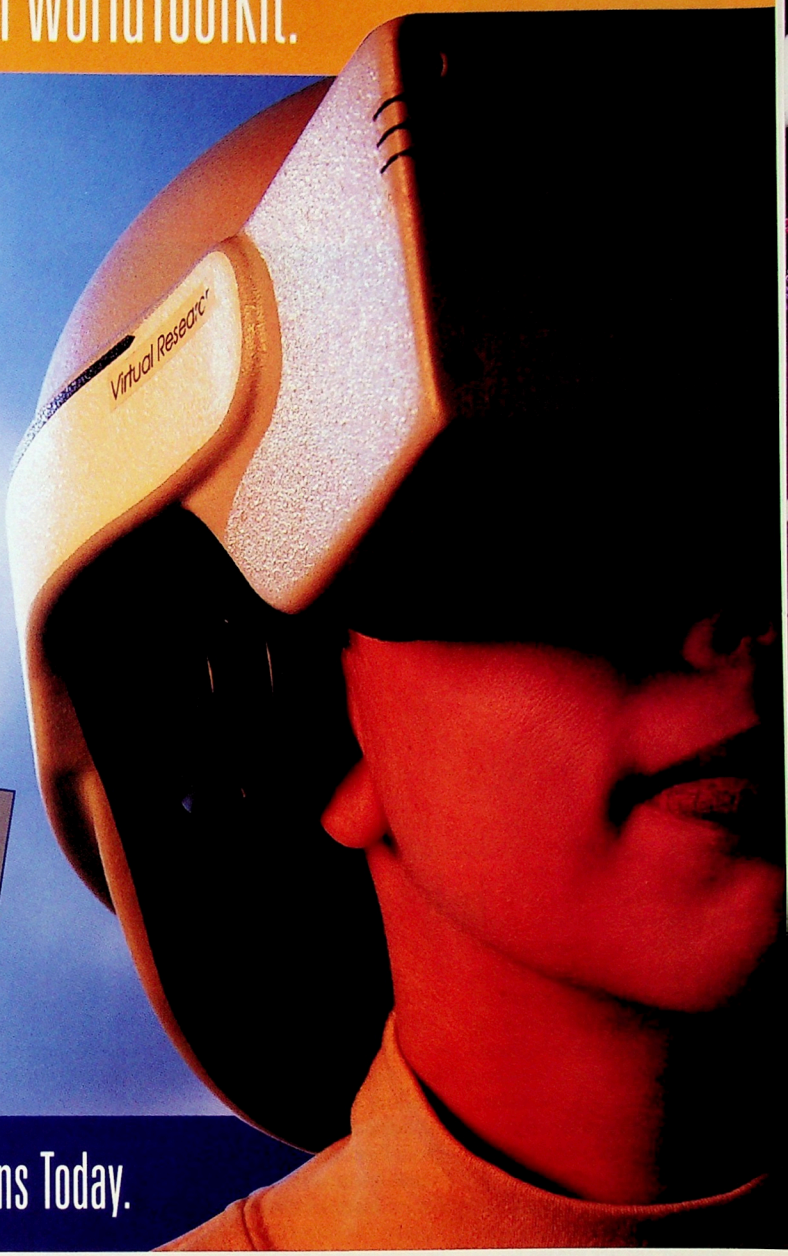

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SENSE 8 Corporation

Be-It-Yourself Tech: IBVA

"Case sat in the loft with the dermatrodes strapped across his forehead, watching motes dance in the diluted sunlight..."

SHADES OF CHIBA

I feel my skin curl with anticipation as I tear open the dermatrode package, strap a radio xmit unit across my forehead, and jack into the machine to hear notes dance in the jazzriffs of my own bio-signals.

This, thanks to Masahiro Kahata, genius neurohacker of Psychic Lab Inc., who reached through a mytho-temporal warp to pull an enabling technology out of Gibson's near-future and thrust it onto our Macintosh desktops.

Paco Xander Natban

IBVA: the Interactive Brain-wave Visual Analyzer. And like Case's darling Ono-Sendai deck, this gem hails from across the Pacific Pond, courtesy of a collaboration between NYC's Psychic Lab Inc. (development), Tokyo's Random Electronics Design (manufacturing), and SF's New Moon Communications (West Coast distributor).

The principle behind IBVA is simple: a small velcro headband holds adhesive 'trodes close to the skin, picks up EEG signals and radio xmits to a receiver connected to the serial port on a Macintosh. Mac software then filters the EEG input stream to detect changes in brain-wave states and displays a 3D graphic for FFT data visualization: alpha, beta, theta, delta. "Brain Switch" options tie changes in brain-wave states to an output stream for controlling animation, Mac sound synthesis, MIDI events and even an RS422 controller data stream.

This means, dear Mondoids, that for less than $1000, you can wire your head into your personal computer.

TEX SPEX FOR MAC HAX

New Moon Communications president Timothy Childs makes his intentions clear: "We're not here to make a buck and get out. Our motivation is long term: to turn cool people on with cool tools."

IBVA's cool, from a clinical standpoint alone. The Beckman Accutrace 100a EEG unit of the 80's gathers dust in a dark corner of my apartment as I coax IBVA thru its paces. Running an Accutrace session means a half-hour prep with odious colloidal gel, syringes and trained tech assistance just to get EEG signals on paper, and the Accutrace retails at about three months' gross salary for a programmer.

IBVA can run on a Mac Classic with 2 Megs of RAM and a couple spare Megs of disk—total system cost less than the price of an extremely used Honda Accord. Built-in software filters & smarts obviate expert techs, and the 3D graphic user interface alone is worth a handsome price. Masahiro-san labored alone five long years to bring IBVA to market, with the SF MacWorld Expo in January being the first public splash. Neuro-cognoscenti predict no less than a quantum jump in garage technology for VR, and this means you!

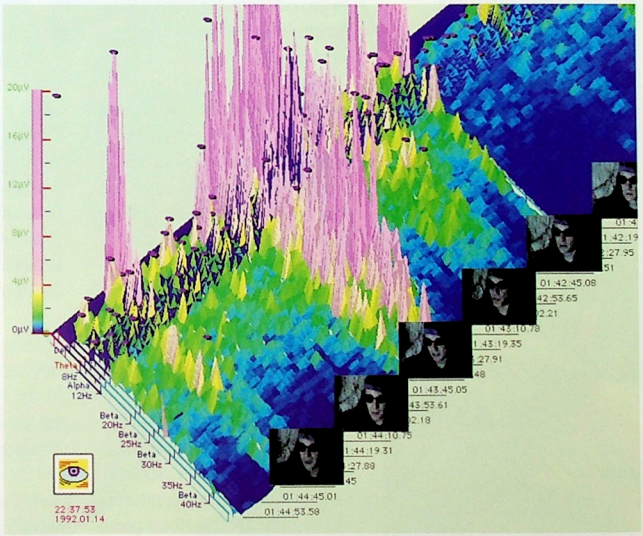
What you do with realtime brain-wave data on a PC is key. My kana may be a bit fuzzy, but a first glance through the user's manual suggests mind training, psychic healing, stress reduction, meditation, sleep work, etc. Standard brain-toy bullet list for any GnuAge grokabilly shopping trip.

TEX HAX NIX MACS

News travels fast. At the mention of a working IBVA unit, a cloud of Austin's finest neuronauts descends in a cybernetic feeding frenzy on my desktop—MIDI

hackers, biofeedback junkies, psychiatrists, occult leaders, roboticists, games writers—all eager to auto-launch their own heads.

Members of Austin's Robot Group help wire IBVA into a portable MIDI/Video studio. They love the unit and see vast potential alongside their own brand of cybernetic art. However, "Mac may be great for software virtuosity, but if you want to sell to artists, develop for an Amiga" sez Alex Iles. "That would provide a common platform for reasonably priced VR tools, like Vivid Effects' Mandala for video-based computer control."



JUST SLIP INTO THIS SLICK TACHYTECH

Meanwhile, John Witham consciously pulls himself into Alpha in mere seconds, then thinks a melody thru his MIDI sampler. Bill Craig peruses IBVA signal processing and rambles off a half dozen alternatives to the FFT: "Finite impulse response, wavelets, peak-period ratios, etc. could be faster and more noise resistant."

Omni-sensory composer and Robot Group alumnus Matt Ridgeway manually patches our MIDI synth array to parallel IBVA's built-in Mac sounds: Cymbal Crash for head movement, Monstrous Thunder for signal noise, Fuzz-Box Synth for the Beta-wave melody and Cool Sawtooth texturing for the Alpha background. Matt muses over IBVA applications in his biofeedback engineering work: "I need a programmable mapping for EEG/MIDI events, even just a lookup table—but I can hack that using IBVA & MAX."

DIY MIDI I/O, KI-YAY

MIDI hacker/composer Elijah Meeker of Austin's Musicmakers extols "Most MIDI products are still designed around a keyboard as input; now we're looking at the human body as an I/O device." Whereas keyboard input is coldly digital, EEG modulation provides the fluidity necessary for modern composition and performance. Elijah looks for music that evolves over time—timbres, rhythms that change as you play. "Something like MidiMouse or MAX (both from Opcode Systems) would be great to modulate with brain waves."

Lawrence Sergic, MD, a dear friend and child psychiatrist is quick to point out some limitations: "IBVA's headband only samples the frontal parietal regions of the brain map and misses a lot of useful EEG detail, in contrast to invasive EEG technology." Moreover, the three 'trodes locate just above your eyes, a horrible region for bioelectric noise from eye muscle movement. "Of course, you can spin the band around to catch occipitals…"

JUST LOOK AT THESE ENTICING ACRONYMS

I tested IBVA version 1.06, which ships on 3 diskettes for a total of about 2.1 Mb on disk. The application only takes up 646 Kb and runs in a suggested memory partition of 2700 Kb RAM, but it can run in only 1 Mb. Data files were tiny: only 30 Kb for a 4 min run. The system ran beautifully on a Mac IIci; run on anything less than built-in floating point support, and you'll need to turn a few graphix options off, but that's no problem.

As for options, the secret word of the day is Myriad. Upon disassembly, I found 592 subroutines written in THINK C and 81 menus! Practically any feature you care to control is available as a menu option. Too much for novices, but defaults are reasonably close to what you end up using anyway and the Myriad could be deadly good fun in the hands of a pro. One caveat: you must run MIDI Manager/Patch Bay and Apple MIDI Driver to access an external synth; these are provided with the software.

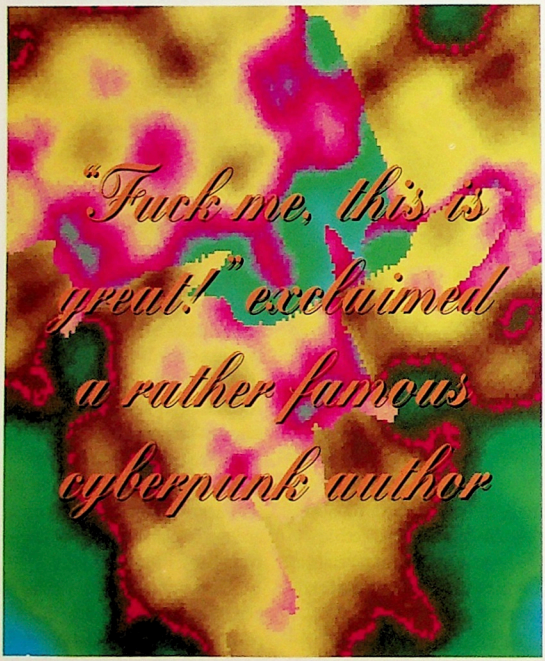
ITTY BITTY PRETTY TECH, WITH FEELERS

On the hardware side… IBVA headband weighs 130 grams, battery included; not an aching load like some VR gear. Radio xmit runs up to 8 hours on a Alkaline 9v, although IBVA lit suggests using rechargeable ni-cads. The receiver, a cute little wallet-size antennaed creature, draws power from the serial port and can be placed in-line to leave a port open for a modem, etc.

Disposable electrodes look like Tylenol tabs and come in a pack-o-ten. I had trouble getting a good connect with the 'trodes at first. And my butt-length hair got in the way of antenna xmission, but hair can be tied in the name of cyberspace. Radio links seemed to die off at about 3 meters: it depends on EMF environs, but that's fair enough range for an apartment or small stage. You can use a Nady wireless to boost the range onstage.

SLIDING SCALARS

Imagine taking IBVA in tandem with available desktop technology for VR... World ToolKit from Sense8 runs on a laptop PC for realtime fly-thrus. After learning to generate EEG signals for 3D spatial control, imagine the legal fun you might experience next to any blank wall with a laptop, a vid projector and IBVA.



Other VR products provide IR sensor arrays programmed through DOS scripts for "virtual funhouse" construction. Add 3 walls and an IR array to the Sense8/IBVA combo and you could literally dance your way through cyberspace for under $20K. The limiting factors for significant bio/video/kinaesthetic reality immersion are then purely time and software, and plenty of us tech-heads know how to modulate those scalars.

On the software front, that evolution will build on two key technologies: MAX and QuickTime. "With the insights of Japan's electronic designer, MIDI-master extraordinaire and Metasound pres. Gohsuke Takama, the IBVA was specifically designed to work with MAX," sez Timothy. "When you get it hooked into MAX, the horizon is much broader." Indeed, the MIDI filter/ switchbay from Opcode has proved itself to be the tool for robotics, stage control, video arrays, and even music.

MUCHO MAS MEDIA

"We're also looking at QuickTime support within the immediate future," adds Childs. QT provides a common base for desktop muchomedia, integrated with state-of-the-art compaction. People developing with IBVA could then trade animation clips online. Another trump would be to provide Frontier wires and scripts to let us tie IBVA into Finder, Excel, SimCity, etc.

Kahata-san keeps the headband/electrode technology evolving. With an optional cable extension you can pull the radio xmit off the headband and hang it in a pocket—or under a pillow. (Tim says that's what he does—keeps the wires out of his mouth.) That cuts movement errors and weight. VR researchers at Seattle's HIT Lab talk similarly of designing a "data jacket" to offload radio/battery weight on torso bone structures, use appendages for antennae and even pick up body power from temperature differentials and heartbeat piezo-electric effects[!!]

FORWARD INTO THE FURNITURE

IBVA's key point—mobility—is gonna change the way we think of VR more than anything we've seen for a while. Frankly, people may want to party on my desktop, but I don't live there. With the IBVA unit, I can wander about in daily life—sports, parties, fun things nowhere near a computer—with the xmit jacked into a camcorder audio track, recording walkman or microcassette recorder. Later on, I download the EEG signal into the Mac, already synched to video. Imagine hearing/watching/-feeling Brian Eno's cranial activity while he wanders thru a NYC crowd. You too can become a walking sim-stim director, in a weird kind of neuroelectronix-meets-Merry-Pranksters montage. I can hardly wait until EmptyVee phinds out about this.

"Fuck me, this is great!" exclaimed a rather famous cyberpunk author on first view, and I must agree. IBVA has a phew problems, crashes, etc., but they'll get phixed. Beyond headbands, data jackets, shaved patches, etc., look forward to flaunting your mind, IBVA style. *Domo arrigato* Masahiro-san for launching our heads into the desktop. M2

Sources:

Interactive Brain-Wave
Visual Analyzer
for Macintosh systems: $995
Psychic Lab Inc.
280 Park Ave South, Suite 7G
New York, NY 10010
Vox:(212) 353-1669
Fax:(212)979-5624

New Moon Communications
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When not in jail for bucking megacorps, Paco Xander Nathan writes software & reviews over the range of neuroelectronix, neural networks & cyberpaganism from deep within the forests of Central Texas. Internet: pacoid@well.sf.ca.us

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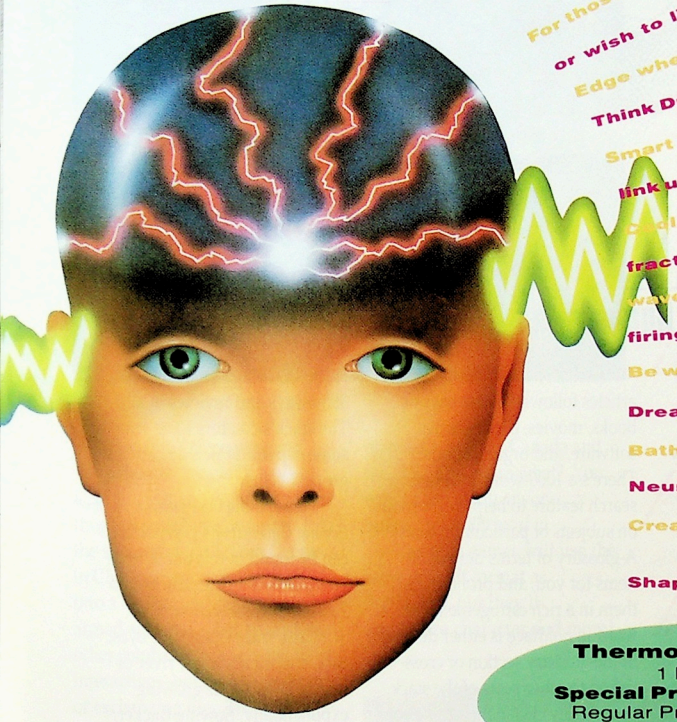

For those who live or wish to live on the New Edge where Virtual Reality meets Think Drinks — the new Mood Food. Check out the Smart Bars, Hyperclubs — turn on to Neuromancing — link up to Brain Machines where Cyberspace explorers, Cool Geeks, Techno-Hipsters enjoy rainbow colored fractal videos — new wave goes next wave goes dream wave with smart nutrients feeding neurotransmitters, firing energy, igniting interactive body/mind mamboe. Be what you want to be this time around. Turn on to Lucid Dreaming, Memory Increases, Yogatronics, Biocircuit Baths — a new Neuroscience with Brain Change Gyms, Neurobics. High Coherence + Neurocomputation + Creative Imagineering → CYBERQUEST!

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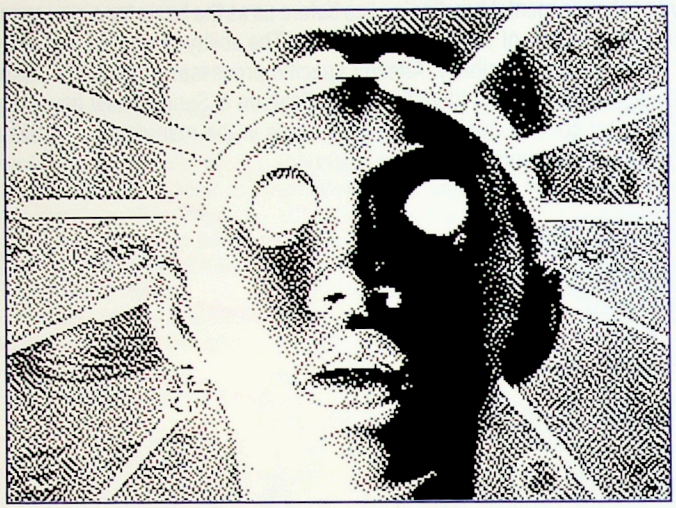

A DIY Guide to the Future

Beyond Cyberpunk, a HyperCard stack created by Gareth Branwyn, Mark Frauenfelder & Peter Sugarman
$29.95 from The Computer Lab
Rt. 4 Box 54C
Louisa, VA 23093

Cyberpunk has evolved from a literary swamp gas to a full-fledged social movement. Its practitioners, who initially disavowed any corporate identity, have become resigned to the understanding—taken from chaos theory—that a butterfly's wings can trigger a hurricane.

In the eye of the hurricane a new culture has been gestating. The Cyberpunk sensibility, coevolving with computer networks and BBSs, has led to the creation of a cyberculture which is so new as to be undefined. *Beyond Cyberpunk* is both a survey of and a guide to this new cultural phenomenon. But it's not a paper book, it's fully electronic—a HyperCard stack filled with text, graphics, animation, and industrial sounds.

Jon Lebkowsky

Exploring this stack is like scuba diving in an Encyclopedia. It's not reading information so much as *romping* in it! The environs here are reminiscent of Terry Gilliam's *Brazil*, an out-of-time industrial cyberverse of high tech and steam tech filled with sighing bytes and the thunder of factory steel. When you first enter, you're accosted by familiar subterranean images: a cyclopean Mickey Mouse, a leering Malcolm McDowell from Kubrick's *A Clockwork Orange*.

Once fully loaded, the stack invites you to visit its four Zones: Manifestos, Cyberculture, Media, and Street Tech. The menus allow you to move freely from one Zone to another, and the alternating browser/pager allows you to skim along with the browser 'til you're ready to read with the pager.

Successful navigation depends on a quick read of the initial help screens once you're in. Look for the question mark. A book mark allows you to set a customized sequence of selections as you browse, while various print options allow you to print whole items, or print out a shopping list you can take with you to the book/comic store.

Each Zone includes several articles followed by reviews of books, movies, comics, zines, software, and organizations. There's a 1000-word index and a search feature to help you zero in on subjects of particular interest. A glossary of terms defines 58 items for you, and pronounces them in a rich estrogenic voice. A word in boldface is either defined in the glossary section or cross-linked to other parts of the stack. You simply click on it and <poof> you're zapped into some other corner of this dense dataworld.

Mark Frauenfelder's cartoon character Kata Sutra appears in random animations as you move through the cards, dropping a sigh or admonition before typing a pithy saying across the bottom of your screen: *Kata Sutra sez: You can go anywhere you want if you look serious and carry a clipboard.*

MONDO readers will recognize many of the contributors, which include Bruce Sterling, Richard Kadrey, Paul Di Filippo, Steve Brown, Hakim Bey, Rudy Rucker, and other islanders in the net. The articles and essays cover cyber art, music, literature, DIY technologies, plus various forms of computer and reality hacking. There are over 300 essays and reviews in all. The stack's creators have mined some especially rich underground veins.

Perhaps the best summary of *Beyond Cyberpunk*'s perspective can be found in this quote from Steve Brown's "Introduction to Techno-Surreal Fiction":

"You must open your eyes, ears, and minds to the river of information that is growing exponentially, flowing thicker, faster, in raging turbulence, interconnecting and recombining beyond anyone's ability to comprehend. You must plunge into that river, hold your breath and ride it out. It is possible, just possible, that you may find yourself washed up onto an alien shore someday, and you'd better be ready." M2

Beyond Cyberpunk *requires a Mac, HyperCard 2.0 and 5.5 megabytes on a hard drive. An 18-page comic book drawn by Mark Frauenfelder is also available for a buck from The Computer Lab.*

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Step into Cyberspace and chances are you'll have to kill somebody to make it through your three minutes. Take the successful BattleTech Center in Chicago: you strap yourself into a cockpit and pilot a heavily-armed armored robot against other combatants. Hey, it's interactive—but only to the point of exchanging fire. This makes Bill Gibson's consensual reality look like a cheery place.

What's ironic about all this is, over half the master BattleTech players reported "other people" as what they liked best about the game. Only fifteen percent liked the gore.

Craig Engler

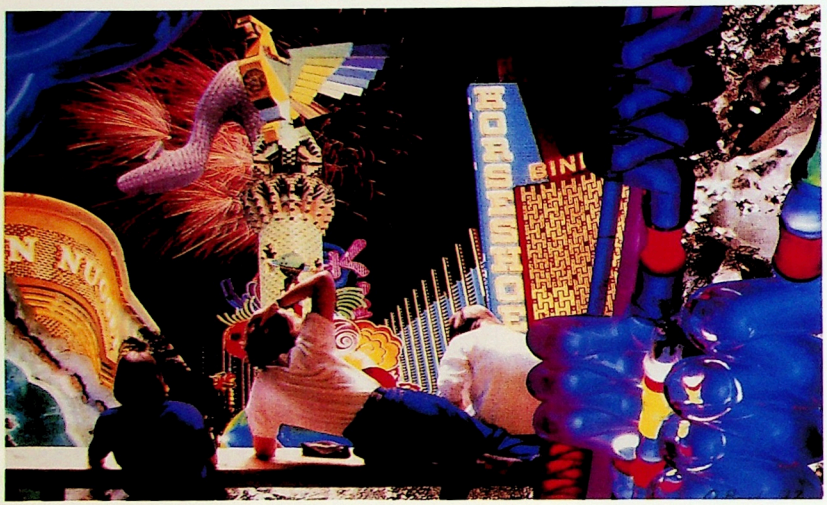
Jordan Weisman is taking these stats to heart. Co-creator of the BattleTech Center, he has five Virtual Entertainment Centers planned for Japan, Canada and the U.S. And guess what? You won't have to kill anyone... unless you *really want to.*

The new games will use the same cockpit format as BattleTech, but they'll emphasize character and moral choice, more like adventure gaming. Jordan says he wants to attract more female gamers and an older audience—people up for an adventure, *and* maybe a little well-rationalized violence.

There's a pithy saying at BT, based on player data: women need a reason to be aggressive; men only need a place. So *Hull Pressure*, a search-and-rescue mission, briefs players with a video introducing them to the crew of the trapped submarine—pure setup. Gotta fight to save that skinny blonde kid.

Possibly more intriguing is a simulation set in the world of *Shadow Run*, a role-playing game put out by FASA. It's a cross between Tolkien and *Blade Runner*, Jordan says, where players try to make things better through small actions. Socketed chips are the equivalent of today's drugs. Just might be the *virtual real stuff.* M2

STREET NOISE



OK kids, give us the gossip—the low-down, high-tech street palaver. "Street Noise" will regularly record the murmurings, shouts, and horn blasts from the tunnels of the underground. Boast of your accomplishments and spread your vicious rumors via: Street Noise, c/o Gareth Branwyn, 2630 Robert Walker Place, Arlington, VA 22207 or on the Internet: gareth@well.sf.ca.us

• Just when Jesse Helms thought he had made the world safe from poetic terrorism, along come "The Immediasts," a cadre of media hackers who are fed up with the "ecology of coercion"

Gareth Branwyn

that surrounds them. Their booklet **Seizing the Media** proposes an all-out artistic assault on "coercive communication, cultural monologue, and media control." They want all media insurgents to take back the airwaves with pirate radio, cable access TV, altering ads and billboards, and otherwise hacking the datasphere to break the spell of State/corporate media control. Their booklet is available for $3.00 from Noospapers, PO Box 2726, Westfield, NJ 07091.

• **Retrofuturism** is a zine that covers art/cultural activism, DIY publishing, and the various networking arts (mail, audio, xerox, fax). Issue #16 has Negativland presenting their views on the Island Records/U2 suit against them for copyright infringement—Just Say Bo No! The appropriation, sampling, and property issues raised in this zine are the legal battles of the near future. As every reality hacker knows: "Information wants to be free" and "Plagiarism® Saves Time." $4.00 from The Drawing Legion, PO Box 227, Iowa City, IA 52244

• Issue 3.3 of **Intertek** is out and it looks great. This one exhumes the age-old beefs about Usenet (the messages are redundant, it's an ASCII-only bandwidth, and there's too much flaming). Some interesting perspectives from the likes of Bruce Sterling, Mitch Kapor, and John Quarterman. There are also excerpts from Gordon Meyer's "Social Organization of the Computer Underground" paper, and a nice overview of MUDs (Multi-user Dungeon), which are a form of online adventure gaming à la **Zork** or **Adventure**. My favorite part of the mag is the "Street and Market" column which charts current hardware prices, high-tech stocks, and such hard currency as metals and drugs. Four bucks from Steve Steinberg at: 325 Ellwood Beach #3, Goleta, CA 93117. Internet: *steve@cs.ucsb.edu*.

• **MONDO 2000** now has its own computer conference, thanks to The WELL and the efforts of hosts Jon Lebkowsky and R.U. Sirius. This is a great place to get day-by-day news of the mondo, and to take a more interactive part in the magazine. You can join The WELL by calling (415) 332-6106 and typing *newuser* at the login prompt. Once connected, type: *go mondo*.

• An international rave party scene appears to be in full swing. You can keep abreast of the latest happenings by checking out the alt.rave newsgroup on Usenet. Party vicariously as you read announcements and follow-up reports from raves all over the world. The lists of currently hot trax are quite useful.

• Steve Roberts, the "high-tech nomad" [see Street Tech, MONDO #4] has created an electronic means of networking others who are interested in his technomadic lifestyle. By sending email via the Internet to: *technomads@bikelab.sun.com* you can be connected to an electronic "many-to-many" network exchanging information on nomadness, ham radio, mobile communities, freelance opportunities, travel security, and hospitality. To join, send a note to Roberts at: *technomads request@bikelab.sun.com*.

• Shameless hype: MONDO contributors Peter Sugarman, Mark Frauenfelder, and myself have just released **Beyond Cyberpunk**, a 5.5 Mb HyperCard stack on cyberpunk SF and real-world cyberculture [*reviewed in this issue*]. Rudy Rucker says "It's the best code to penetrate this year." Only $29.95, from The Computer Lab, Rt. 4 Box 54C, Louisa, VA 23093. M2

ANTHONY BONDI

VIRTUALLY WITHOUT A BUDGET

All over the world, techno-geeks are starting to crawl into their computers. Until now, virtual space was accessible only in research labs with gigabuck budgets. Now the budding cybernaut can build a crude but workable system at home—on the cheap.

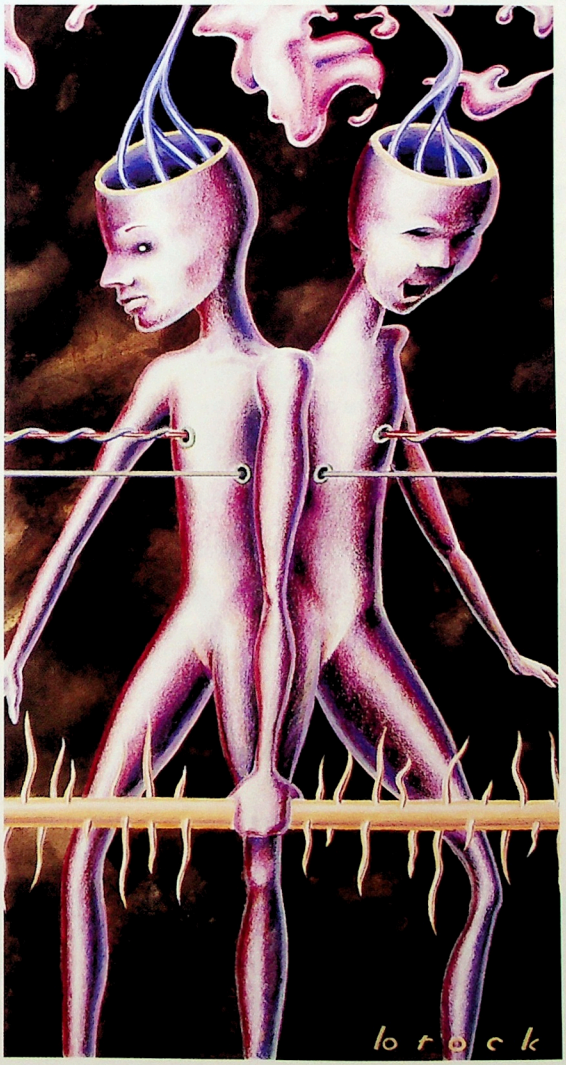
The most important component of any VR system is a computer powerful enough to keep track of all the petty details that maintain a believable virtual space. You need a real machine—with an MC68020 or i386 processor or better. Swiping your little brother's Commie-64 won't do it. VR takes high-speed polygon drawing and realtime response to input events. Your best bets are a high-end Commodore Amiga or a 386-25 with an ultra-fast VGA board.

The best VR systems use helmet-mounted stereo video displays which our easily-duped brains merge to a 3D image. The Color LCD screens in these systems are not cheap. The bargain hunter will find that LCD shutter glasses (made by Sega and Nintendo) are an affordable alternative. This device looks like a pair of sunglasses, with a computer-controlled LCD shutter over each eye. An image is flashed to one eye while the other eye is blacked out, in rapid alternation, for 3D.

Ethan Dicks

There are many ways for the computer to monitor and interrogate the online cybernaut. The single most popular device is a sensor glove. Top of the line is the DataGlove from VPL Research: several thousand dollars worth of treated fiberoptics and infrared diodes with a magnetic tracker to follow its wearer's every whim and spasm. A down-to-earth alternative is the PowerGlove, made by Mattel for the old 8-bit Nintendo.

The PowerGlove uses resistive plastic to measure finger position, and ultrasonic triangulation for hand position and orientation. With special software you can put the glove into a high-resolution mode, wherein a multi-byte packet is sent from the glove with position, rotation, flexure and keypad information. Public domain software for the PowerGlove is available for most systems, including the Amiga, the NeXT and the Atari ST, from the PowerGlove mailing list. To sign onto the glove-list, send email to *glove-list-request@karazm.math.uh.EDU*. This is a good place to get software, and you can also exchange ideas with others working on inexpensive VR hardware.



Tim Brock

Other potential VR input devices were also originally designed for the Nintendo. These include the U-Force from Broderbund—an infrared position sensing device; the Power Pad—a pressure sensitive mat; and the LaserScope—a head-mounted lightpen with built-in stereo speakers. While not particularly high-tech, Nintendo-compatible devices are cheap enough for you to afford a spare, are available at the corner discount store, and can survive child-tantrum-grade abuse.

Although armchair cyberspace is still a few years away, it's possible to put the building blocks together now without spending a year's income. State-of-the-art VR hardware comes with a state-of-the-art price tag, so don't expect *The Lawnmower Man* on a PCoid. Fair enough: with $20 and $30 devices you can plug yourself in and begin to build a world which extends no farther than your desktop, and as far as your imagination can reach. M2

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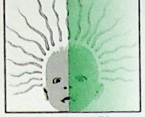

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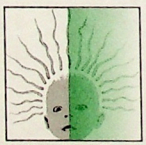

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Coming Soon...

Jann's got to keep his finger on the dark vein of the World Beyond... MONDO 2000 is putting together a team of virtual surrealists to send to that atoll where they found Amelia Earhart's shoe, hoping to channel an interview...

—Ken Kesey in *Rolling Stone*

JACQUELINE NEUWIRTH

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WALT WHITMAN'S CALAMUS HABIT
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Liz Zivic

1▲ ▮ 2▲

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Eggheads of the World, Unite

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This is your brain on **Bite the Wax Tadpole**. Hard boiled, over easy, sunny side up, or just plain fried, your mind will never be the same after **Bite the Wax Tadpole's** latest cassette release, Satan, Oscillate My Metallic Sonatas.

Bite the Wax Tapole — the thought-scramblers whose tapes have been called "wonderfully funny…a wild and wooly trip through bizarre minds" (**Factsheet Five**), "stunningly original …and …disturbing" (**Option**), and, simply "masterpiece[s]" (**Ear**).

Now, **Bite the Wax Tadpole** serves up **Satan, Oscillate My Metallic Sonatas** (spell it backwards), an 11-cut, 60-minute brain soufflé featuring guest appearances by Chunk's Samm Bennett, turntable player Christian Marclay, and neurocore composer/guitarist Elliott Sharp.

Satan, Oscillate My Metallic Sonatas. Songs about a stogie-chomping businessman who wants his employees to squeal like piggies, a la **Deliverance** ("Big Business"); a tribesman born with a hungry wolf in his belly ("Emperor Worm"); an assembly-line drone who loses his fingers to an infernal machine ("Skinner Box"); and a night clerk in a hotel haunted by the ghosts of senile dementia ("Whoops and Cries Up Above the Sun"). Songs propelled by fuzzbox trumpet, hardcore banjo, hexaphonic guitar, steel drum, hip-hop beats and enough media bites to give Marshall McLuhan a migraine.

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Mutate Your Desktop

It's time to break out of the box. The modern graphical user interface (GUI) has opened up easier ways of dealing with computers, yet is itself a barrier that few feel prompted to bypass. The "box"—the usual desktop computer with its usual inputs and outputs—cramps creative style and is—yes—less than portable. Breaking out of the box doesn't necessarily require mega-buck equipment or an E.E. degree. With a little effort you can circumvent those interfaces that make you conform to the whims of your machine.

Dany "Xixax" Drennan

HANDS ON THOSE SWITCHES

How to move beyond the GUI paradigm? The how-to of interfacing creatively with one's silicon alter ego comes down to switches. On, off... such is the soul of any computer or electronic device, and their communications with humans. Switches.

Before you seize control of those switches, you are going to need a basic knowledge of electronics and a programming language. The true-false logic of one nicely complements the on-off logic of the other, so although the initial learning curve may be high, it only gets easier. Go to Radio Shack and purchase every book that Forrest M. Mims III has ever written. Begin with *Getting Started in Electronics* and build up from there. Buy a solderless breadboard, some 22-gauge connection wire and anything else that Forrest recommends. Do not be put off by his use of electrons with smiley faces on them. *Do not take Forrest M. Mims III's name in vain.*

NEW INPUTS FOR NEW OUTPUTS

Magnetic or electric sensors, photo-sensitive/infrared, sound-sensitive devices, telephone touchtones and motion detectors can be tuned to interconnect with your computer.

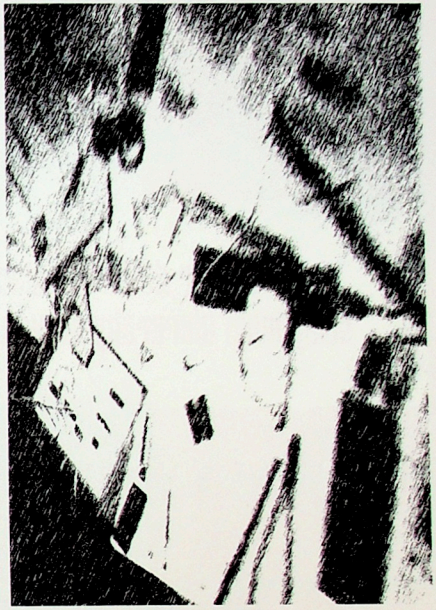
Coming up with input devices isn't a problem—you've got an abundance of options. A keystroke is a switch that closes to make a signal, to generate information. *A stripped-down keyboard provides upwards of 100+ switchable inputs.* For example, the two holes left by removal of the "G" key are easily wired to an input device that—when activated—would send the "G" symbol to the computer. A software program responsive to a "G" could recognize that input and fire up the laser show, or whatever.

The common mouse, vivisected, is basically two patterned wheels which trip photo-sensitive switches as they turn. The mouse produces a screen coördinate position based on the movement of these wheels. Simple? No, but think of the possibilities.

If pot-holing your keyboard and eviscerating your mouse don't give you the effects you need, you may need an intermediary device that will translate information into something the computer can digest. For example, there is the **Gold Brick** from Transfinite Systems, a device that connects to the Apple Desktop Bus of a Macintosh computer. It takes the input from Nintendo devices, power gloves, floor pads, etc. and translates it into dimensional information or ASCII keystrokes. Microcontroller boards exist that translate serial or parallel port communication into logical highs and lows understood by electronic apparati, and vice versa.

LET'S DO A PROJECT!

You spend days wandering around Radio Shack. You subscribe to all the schematic-endowed electronics magazines. You brush up on BASIC. And now you want to turn on your lights at home with a phone call.



Or maybe fire up your computer. The applications for it are many, but the device that does it all is something like this:

THE TOUCHTONE DECODER (INPUT)

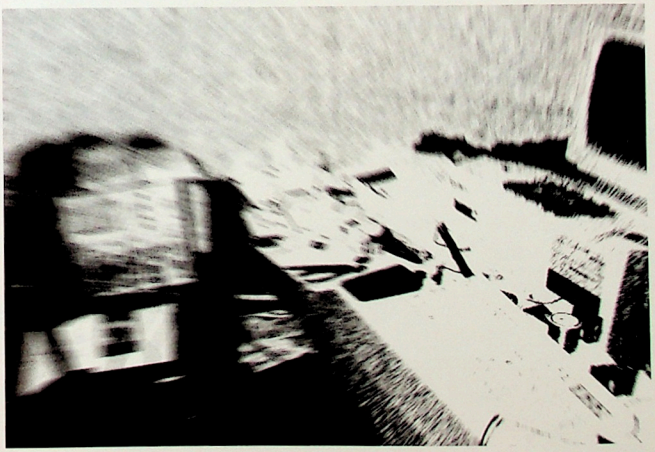
An ordinary telephone touchtone signal is made up of two tones, one from a high-frequency group, the other from a low-frequency group. Combined they create what is referred to as a dual-tone multifrequency or DTMF. A DTMF decoder integrated circuit (IC) translates incoming touchtones into binary-digit equivalents of the numbers 0-15.

The binary output could drive a liquid crystal or light-emitting diode display, and/or be sent to a computer for further action. In this way the binary output of the telephone tones can be used to control computer activity, devices connected to the microcontroller, etc. This is the starting point for tone-remote answering machines, voice mail and fax-back systems, and home-security devices.

THE MICROCONTROLLER (TRANSLATOR)

A microcontroller is a very small computer: a central processing unit (CPU) chip, optional memory chips and input/output ports to receive and transmit data. They can be programmed and will operate independently of the big box.

The microcontroller pictured here is based on an Intel 8052 IC that uses the BASIC programming language. It may be connected to a computer's serial port for further programmed processing. It has eight I/O ports as well as the serial interface to the computer.



Constructing a microcontroller board will give you an understanding of digital circuits and logic, but of course you can buy microcontrollers such as the **HyperTrol board** that are ready to run.

THE ACTION (OUTPUT)

As an example, let's connect the touchtone decoder output directly to the microcontroller. The binary number is four digits long, so this uses up half of the microcontroller's eight ports. The

touchtone decoder turns each of its four output pins on or off based on the incoming tone. The "on" signal might be a one, and the "off" signal a zero. Write a program in BASIC that waits for valid input from the phone. When it senses an incoming tone, it will take the four "ons" and "offs," and use the binary digit thus represented.

If the microcontroller is hooked up to the computer, it can send the data received to the computer where a software program would be waiting for input. In this way the incoming phone data can drive onscreen events. Alternatively, the incoming signals can output directly over the four remaining ports on the microcontroller, which could be feasibly hooked up to anything that is powered by switches. On the simple side, you could now call home and turn on the lights or power up any other device hooked up to the microcontroller.

How far down the electronic component hierarchy do you want to go?

Depending on your programming skill, you can attack more complex applications such as voice mail or other telephone-driven computer programs. Program it to have password protection, or have it execute at a given time later on.

I could list hundreds of possible applications, but the limit is your creative imagination. How far down the electronic component hierarchy do you want to go? The devices are simple—easily assembled or bought. They are a crucial first step away from the keyboard/mouse standard of human-computer interfacing. Out of the box! M2

RESOURCES:

ELECTRONICS MAGAZINES
Buy all those cheesy electronics magazines written by balding bellied middle-aged men. The last refuge of the formerly universal generic pronoun 'he.'

COMPUTERCRAFT MAGAZINE
The monthly bible of computer hackers. Home of Jan Axelson, high priestess of microcontrollers, exception to the above generic pronoun rule.
76 North Broadway,
Hicksville, NY 11801
(516) 681 2922

DATA COMMUNICATIONS
If you are interested in telephony, than you will need a book on data communications such as *Data Communications—A User's Guide*, the basic college text by Kenneth Sherman.

THE TALKING TELEPHONE
by Steve Sokolowski.
Published by TAB Books.
Almost everything you ever wanted to know about telephones.

GOLD BRICK
Transfinite Systems Company, Inc., P.O. Box N, MIT Branch Post Office, Cambridge, MA 02139.

MAXX
A programming language that deals with MIDI or other input or output manipulation.

HYPERTROL BOARD
A microcontroller from Alpha Products
(303) 938 1662

It began when Morn

Hyland came into Mallorys Bar and Sleep

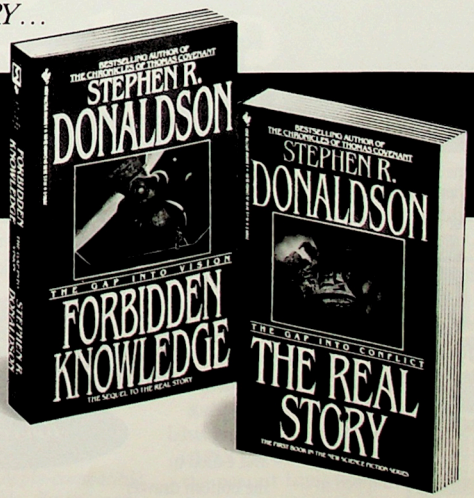
with Angus Thermopyle... *She was gorgeous.*

In contrast, he was probably the most disreputable man who still had docking rights at the station. *No one was surprised by the current which sparked across the crowd when she and Nick Succorso* *first spotted each other.*

They left together to become the kind of story drunks and dreamers told each other when Mallorys was quiet and the thin alloy walls seemed safe against the hard vacuum of space and the luring madness of the Gap.

That, of course, was not THE REAL STORY...

THE REAL STORY
and
FORBIDDEN KNOWLEDGE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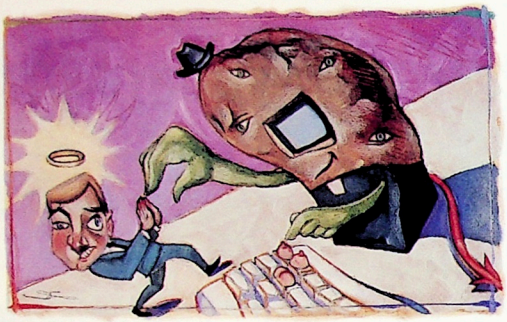
The Dumpster Shopper's BBS



Your Own Private Idaho, Online

In the *We're-all-pals-now-buy-something-expensive* world of Macintosh software distribution I found little tolerance for the "adult" or controversial. To elude the MacCensors I started my own Bulletin Board System, dedicated to the distribution of Macintosh programs that dare not speak their names.

The decision to start a BBS came about 30 seconds after I opened my final rejection notice—this one from the president of the Heizer Software Exchange, condemning me for crimes against Christianity. I had sent him MacJesus. He should thank God it was only a demo disk.

They say Revenge is a dish best served cold, and a good thing: it was a month to research the BBS, and another month to scrounge and assemble the parts, before I cranked over Private Idaho for the first time.

Then I had to develop a user base for the only Techno-Anarchist Pagan BBS in Boise, Idaho. Many local users are sons and daughters of Joseph Smith, interested in downloading only mundane technical stuff. To encourage these users to broaden their horizons I eventually developed a Filth Download policy. I offer up tantalizing sweet fonts and tasty utilities. Then to remain online they must download such classics as:

• **MacJesus**—the self-help program that operates from the premise that you're poor, you're a criminal, you sleep with sheep.

• **Mormonoids**—trapped in the town of Mormonville, armed only with a .45 automatic and a suitcase nuke, you must destroy YogSoggSmith before sobering up.

• **Porno Writer**—the program that churns out endless *Penthouse*-style letters, all permuted around my secret formula.

The phone lines still vibrate with the cries of online Christian soldiers who discovered MacJesus had entered through their serial port. Think of it as corrective surgery for the religiously impaired.

Setting Up My Own Public Idaho

Unfortunately my only experience with telecomputing had involved trying to wire an ancient 300-baud Anchor modem (with a port that looked like a latex novelty) to a 512K Mac. The results remain classified. And my financial sitch precluded buying everything and hiring someone to get it online.

My first break came when a much-despised 1200-baud ProModem at my workplace was replaced and exiled to the bottom drawer of the bookkeeper's desk. I borrowed it *for evaluation purposes only*, with the idea that I would return it when I was finished evaluating it or when cows learned to yodel.

Now that I had the modem for my trusty Mac Plus, I needed BBS software which was easy to use and very cheap. I ran across a piece of freeware—HyperBBS.

HyperBBS was written by Apple employee Harry Cherley, "with the hope that a simple-to-use BBS... will foster an explosion in BBSs." Released during the Amazing Mouli years of HyperCard—*it organizes, it launches, it does julienne fries!*—HyperBBS never caught on among Macintosh sysops, maybe because it lacks amenities. Nevertheless it's the penniless tech-virgin's choice.

The Dumpster Shopper's BBS

The Mac Plus was also right for the job: its almost-dead analog board made a picture a sometime thing.

This was okay for a BBS, which just grinds along in there on its own, and it meant I didn't have to find a screensaver.

The hard drive I got secondhand, *very cheap*, because it had contracted a case of "stickitis"—shut down, it sticks and won't start up again. Computer experts say that the treatment for stickitis is amputation. I say, *never stop it and you won't worry about starting it again.*

After a short time I discovered that BBSs grow as large as their hardware will allow. What this meant personally is that I had to get a 2400-baud modem. (I combined a month's beer money with $25 I received for transferring the ProModem evaluation rights to a friend.) I also had to delete Word Temp files 1 through 4,567 from my System Folder to free up space on the Mac hard disk.

I'm still tinkering with the amenities on the Board. Being a sysop is fun, and I'm sure many Americans will sleep more soundly knowing that megabytes of perversion and heresy are only a phone call away.

Private Idaho TechSpecs

Computer: Apple Macintosh Plus. This Mac Plus is a member of the Church of the SubGenius, wherein its title is "Reverend Idaho."

Modifications: 2.5 megabytes RAM; Kensington "Mac With A Mohawk" External Fan

Mass Storage: Internal Quantum 80-megabyte hard drive stashed in the external hard drive case of a deceased CMS 30 meg.

Modem: 2400-Baud Best Data "Smart One."

Robert Carr says that in Idaho everybody who's weird gets out or goes underground. He works in a basement.

Your modem can call Private Idaho at 208-338-9227.

Robert Carr

Julia Colmenares

SEE US AT MACWORLD, BOSTON BOOTH #520

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Vertical Refresh Rate — 75 Hz

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Screen size (rounded) — 15 inch diagonal
Resolution — 80 DPI WYSIWYG (same as Apple Portrait)
Vertical Refresh Rate — 75 Hz (same as Apple Portrait)

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Screen size (flat) — 15 inch diagonal
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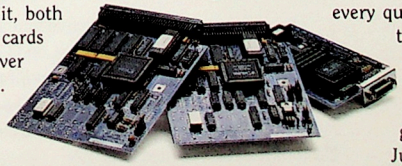

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GLEN KIM

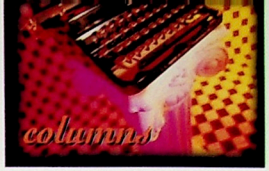
Loved your enthusiastic response to my sex column in MONDO #5. Thanks for the delicate wearables and indelicate propositions. Keep those scented bras and letters coming in, folks.

Nick Herbert

Unified field theory—the hottest game in science today: Einstein's Dream, the physicist's Holy Grail. Here's the story to date.

Once upon a time there were five fundamental forces: Electricity, Magnetism, the Strong and the Weak Nuclear Forces, and Gravity. In 1861 Scottish physicist James Clerk Maxwell performed the world's first unification by showing that electricity and magnetism are not separate forces, but two aspects of a single electromagnetic field. Light, TV and radio waves, X-rays and gamma rays are merely coupled electric and magnetic ripples in Doctor Maxwell's unified field.

More than a century and countless physicist man/woman-hours later, a second successful unification took place. In 1979 Steven Weinberg (USA), Sheldon Glashow (USA) and Abdus Salam (Pakistan) shared the Nobel Prize for their electroweak theory that joined Maxwell's field with the weak nuclear force. Three down; two to go.



Now physicists are busting a GUT (Grand Unified Theory) that will bring the strong force into the community of fields. Next: the final frontier—the creation of TOE (Theory of Everything) that will link all 5 forces amicably together.

It may take another century or two before GUT and TOE are accomplished, but most physicists are more optimistic. Cosmologist Steven Hawking reasonably imagines that he will witness the end of his profession during his lifetime—the physics job market collapsing under the weight of its own success.

Is that all there is? Can the universe be completely explained by uniting the physicist's five forces? Or are there deeper structures upon which these forces rest? Some Eastern cultures consider *consciousness* to be the fundamental reality, dismissing the entire physical universe as a perceptual fiction. From this point of view the physicist's five forces are constructs as fundamental as the mating habits of the newt. But what sort of science could be based on world-as-illusion?

A couple of scientists with reasonable credentials are working on that question. Doug Seeley and Michael Baker, associated with the South Australian Institute of Technology, have developed a model of reality they call LILA—which means "play" in Sanskrit.

They begin with the premise that in actuality we all are not Many, but One—a single cosmic Mind. From this hypothesis they propose to derive all of physics, from the mass of the electron to the special theory of relativity.

They are presently transcribing their LILA scheme into a computer program. When it runs, it will model the history of the Universe, showing the emergence of the laws of physics, from basic forces to the values of fundamental constants. Pretty ambitious for a model based on the mystic's vision.

In the LILA story, before time, space and matter came into existence, One Mind Is. The physical universe began with an (obviously) unprecedented event: "the blanket denial," when "parts" of the Timeless Mental Unity unaccountably refused to recognize their connection with other "parts." This blindness to reality caused the physical world to suddenly spring into being, an event we know as the Big Bang. Perceptions in terms of "space," "time" and "matter" are the subjective consequences of this disconnectedness—this ignorance concerning the unified nature of reality. What you don't know *can* hurt you, of course. It can also create a Universe.

The evolution of the post-Big-Bang Universe, according to LILA, consists solely of entities "wising up"—renouncing the illusion of separateness, and accepting their deep connection with other entities as fact. (How far along are *you* in this process?) The laws of physics, in this view, consist of certain persistent "patterns of ignorance" that remain while more and more sentient entities connect up. When all entities connect—in a grand terminal event the authors call "the Restoration"—the physical Universe simply vanishes, a several-billion-"year" error corrected.

Because the fundamental gesture in the LILA universe is the act of re-connection, the LILA computer simulation resembles a model of gas atoms condensing into a liquid, or the progressive construction of a telephone network. For starts, Seeley and Baker assume that the choice to reconnect with another entity is made at random. They then examine non-connections for evidence of "structures of ignorance" that "from the outside" might bear some resemblance to the laws of physics.

They consider their model an early success, because it predicts a post-Big Bang connection frenzy preceding a long era of more leisurely connectings. The authors propose that LILA's connectivity orgy corresponds to physicist Alan Guth's "cosmic inflation." (Guth posits that to achieve today's observed high uniformity from a messy beginning, the Universe explosively ballooned before settling into its now-gradual expansion.)

While the authors expect LILA to have consequences for "inner space" eventually, they're working on their theory's relation to physics before moving on to human psychology. According to Seeley and Baker—who can be reached at Centre for Sacred Science, Box 137, Flaxley, South Australia 5153—achieving final Unification will result not merely in the loss of a few physics jobs, but the End-of-Reality as we know it.

Hey: we're One? *That's All, Folks.* ME

The Grace Jones

IRRESPONSIBLE JOURNALISM

Schools for Girls

Phys ed courses covered basics like Kegels and hand-to-hand combat

St. Jude

Life is different for a female nerd. You live almost completely on the wire. People you know intimately you never meat, face-to-face. Interface-to-face is the real intimacy: mind to *mind*. Anyway, I like ghosting in the machine. In here, I got the bandwidth, baby—I can cope. Out there, heh... It's pre-Rev.

I was hanging out on one of the glitzy boards when a chat room attracted me: FUTURE NOW. I came into a conversation that made me hit the CAPTURE at reflex speed. This was weird. I interposed myself at a comma, and asked for an identity check.

Bar_none introduced herself: a sophomore at the Fresno franchise of the Grace Jones Schools for Girls. Time-slipping, looking for factoids on Old-tech for a term-vid in History.

MONDO 2000: Factoids passing for History???

Bar: Sure. History has always been factoidal. Nowadays History is recognized as an art form, so no worry.

M2: Nowadays?

Bar: It's November 13, 2023. I have a grant for an hour online. Hi, guys!

I am well and truly boggled. Something good for a change.

So... How's school?

It's cool.

You say COOL?

Sure: slang goes in cycles. Cool is cool again.

Well, how is it over, or up, there?

Better than where you are—no offense. Pre-Rev's pretty scary socially.

Which revolution are we talking about?

We call it Sexual Rev 2.

??? (!!!)

It would take a while to explain.

Please. Short form, no problem.

So she starts in, like she's got it all memorized:

Okay: Sexual Rev 2 started in the 90's. The first, in the 60's, was just the breakthrough into DOING sex. The second was about what gender meant.

The homosex people started it: they began to figure that sexuality is a spectrum. Active-passive, butch-femme—just a line of points that you could hit at different times, or settle on, as you chose. Hetsex people started to see that—assertive females, sensitive males—in the 80's, before they were equipped to cope. They were trying to complete the spectrum without the bandwidth: there was the male side, and the female side, and the overlap was a lousy few angstroms.

So, the nineties?

Well, hetsex changed. You had Schwartzenegger and Melanie Griffith—big man and little girl—but weird stuff was creeping in. Fantasies like Grace Jones, the female adult—who could wrestle a guy down or wisecrack him to death. And the Toy Boy, the pretty-face who'd do you all night—and do his nails with you in the morning. Manly women, girly boys: the rest of the spectrum.

Powerful turn-ons, but WEIRD—taboo. So there was a lot of fantasy stuff: male passives and female dominators, who just did games, scenes—like reading the score instead of hearing the

music. And there were the Wussies—Soft Males? Poor dudes; they were trying to reach the female side when almost all females were Ladies—Anitas.

What's an Anita?

That was a landmark in the revolution—like Bunker Hill? Anita Hill. She was trying to deal the way females did, then. But there was no WAY she could cope: she was a Lady. Did that happen yet?

My God! I hope some phone line shitstorm doesn't blow me off the Board—Old-tech, don't fail me now.

Yeah. What about it?

Well, that inspired the Grace Jones Schools for Girls. This was when public education was an oxymoron, so…

Wait: I get it. You study martial arts? Body-building? Marksmanship?

Are you fucking with me?

No, guy: I live in desperate times. Tell me.

Okay. So, the question was, How can girls grow up to *cope*? Be full-spectrum adults, not Ladies. Ladies were never adults. They were Innocent. Protected. Losers.

So the first curriculum was built around Strategic Sex Education. PLENTY RAD at the time. Phys ed courses covered basics like Kegels and hand-to-hand combat. And academics: Compensatory Anat & Phys, Sexual Rhetoric, Female Pornotica, Creative Electronics, Sports Illustrated. <—That last one's a joke.

Chador etiquette. And Hacking the Wired-in Programming is ongoing, every semester.

WHAT WIRED-IN PROGRAMMING?

What comes with the primate hardware, you know. Alpha-mode programs, for starts: status and aggro—fight-bluff, fuck-bluff. That's basic. And how to separate out the Breeding routines from the Coupling routines—that's a big one for girls. And hacking your own Sexuality wetware. It gets gnarly.

This connection better hold: no thunderstorms, no rats biting the wires, please…

Really, guys, I should log onto the Outlaw boards now: gotta talk to the teeners.

WAIT: tough girls. What about the BOYS?

Girls, boys. Smarter *people*. The GJs attracted a lot of top talent in education, since regular schools were a joke. So they went co-ed.

CO-ED???

Yeah—that's when it got really interesting. A lot of behavior is hormone-linked, you know. A wise-ass in the beginning tried to get government funding: the GJ Schools for the Hormonally Challenged. Claimed that in a Neo-Cap society testosterone deficiency is crippling. But Jeez, a heavy testosterone load is a handicap too. You have to cope on both sides. (Nowadays you can tinker with your chemistry, if you want to.)

And when we went co-ed we did get subsidized, and went local everywhere.

Didn't the churches go nuts?

I guess they did, but GJ has real education. Interactive maximedia. Library of Congress online, with text analysis so you can figure bias and POV.

See, when everybody knows the moves and can hack them as they're played, it's a whole 'nother ball game. Alpha-mode still runs the world, but the geezers are playing it blind. We'll take over easy. And, yeah: WE'RE READY.

Look: gotta go! Jude—hang in there, chick!

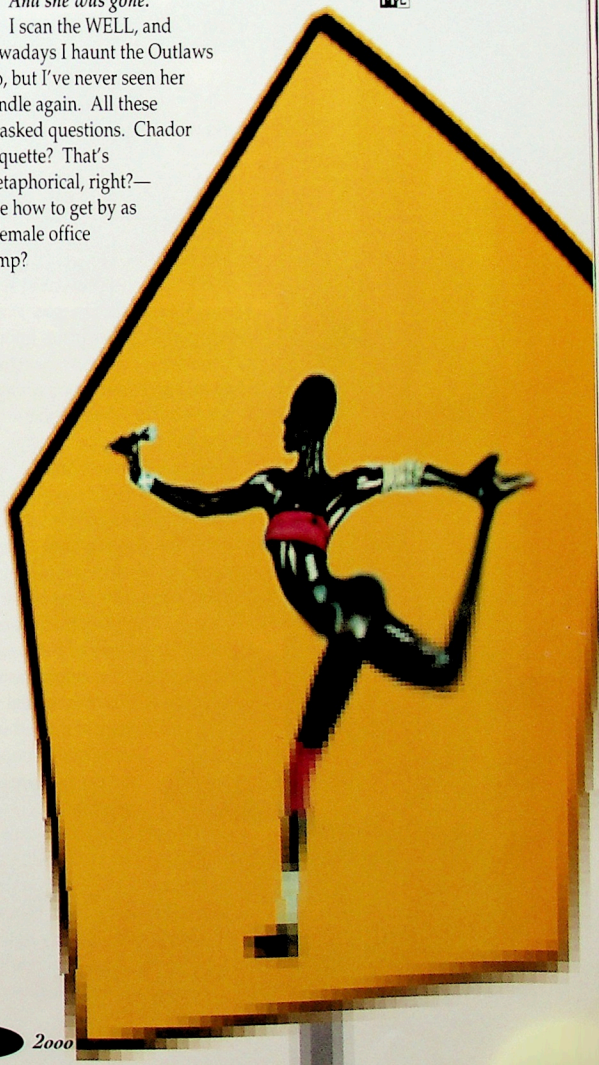
And she was gone.

I scan the WELL, and nowadays I haunt the Outlaws too, but I've never seen her handle again. All these unasked questions. Chador etiquette? That's metaphorical, right?—like how to get by as a female office temp?

Understand: I don't believe it for a minute. There is no fourteen-year-old like that in any world, present or future. She's just some crazoid with a great line of patter. But I do wonder…

Maybe I'll run a DBA search. Maybe I could get in on the ground floor at The Grace Jones Schools for Girls.

M2



BART NAGEL

Terrorvision:

The twentieth century is... the filmed century.... The whole world is on film, all the time. Spy satellites, microscopic scanners, pictures of the uterus, embryos, sex, war, assassinations, everything.

—Don DeLillo

"Everything with you is seeing, *isn't it? Your primary sensory intake that makes your dream live is* seeing*—reflections, mirrors, images."*

—William Petersen,
in *Manhunter*

We watch, and are watched.

"Our society is not one of spectacle, but of surveillance," wrote Michel Foucault, in *Discipline and Punish: The Birth of the Prison*. Spy satellites read license plates from empyrean heights. Motion-sensing cameras swivel to follow the movements of bank patrons, convenience store customers, elevator passengers. In chichi emporiums, behind two-way mirrors, security personnel lie in wait for shoplifters. Thumbnail-sized video cameras may soon record all transactions at automated teller machines.

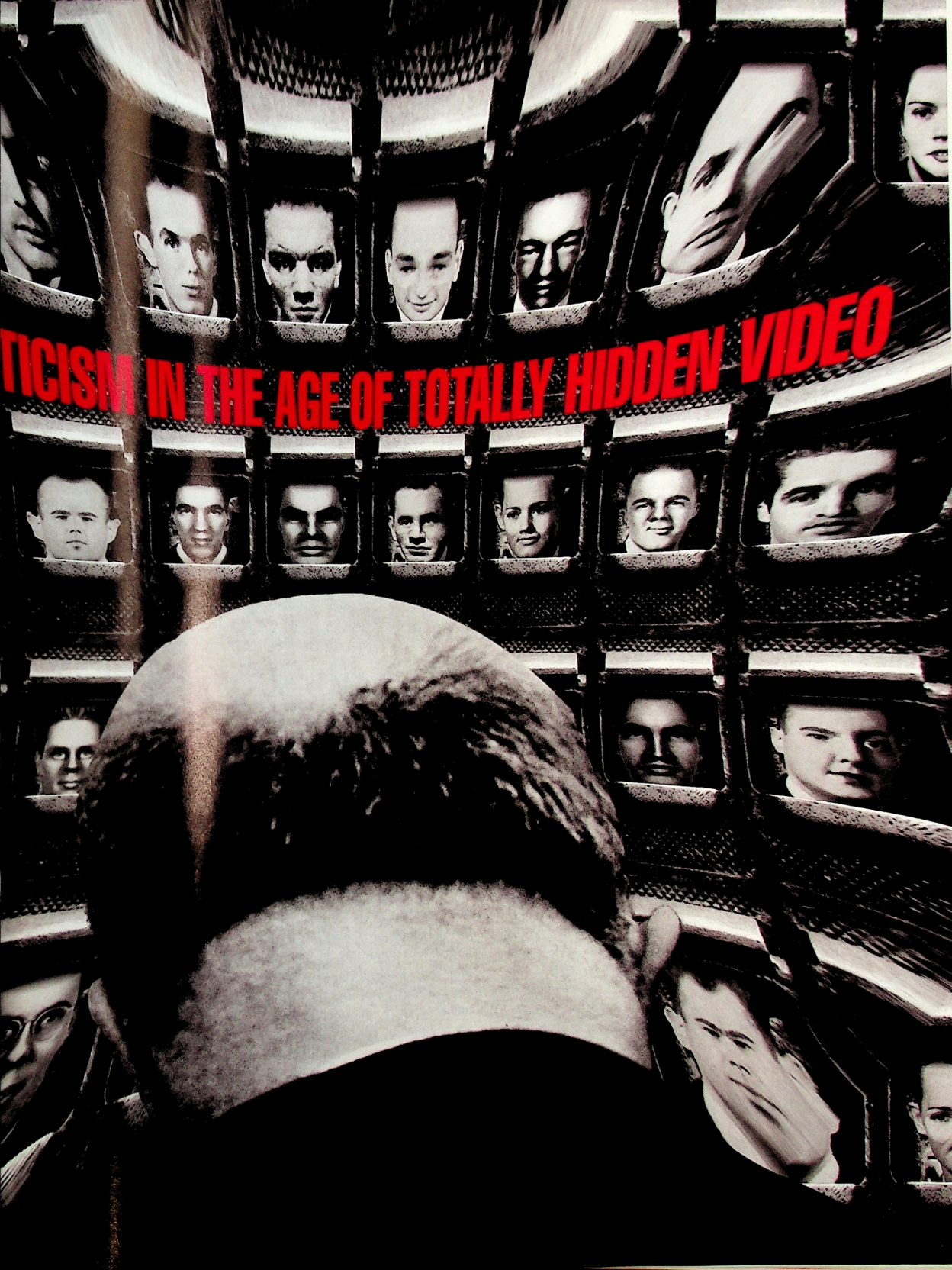
A New York City snoop shop called Spy World sells night vision goggles, briefcases with secret cameras, and spectacles with rear-view mirrors. The owner, a former "bug planter" for the NYPD, will install concealed cameras for jealous lovers who wonder what goes on in the bedroom when they're not home.

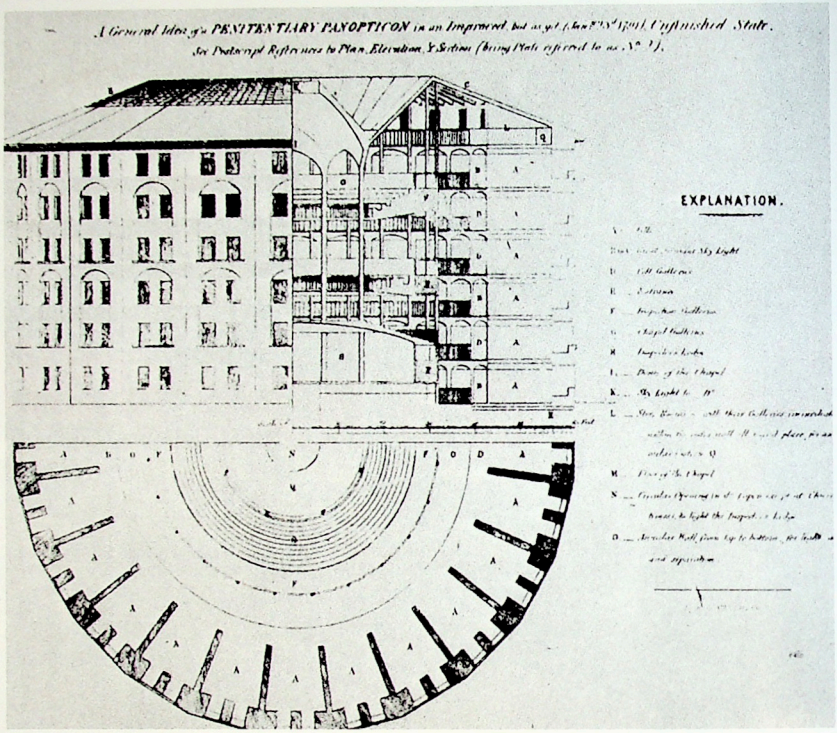
"On the horizon of the next millennium," writes Mike Davis in *City of Quartz*, "an ex-chief of police crusades for an anti-crime 'giant eye'—a geo-synchronous law enforcement satellite." For now, though, law enforcement will have to content itself with *Blade Runner* surveillance technology of the sort used by the LAPD airforce—French Aerospatiale choppers whose "forward-looking infrared cameras are extraordinary night eyes that can easily form heat images from a single burning cigarette, while their thirty-million-candlepower spotlights, appropriately called 'Nightsun,' can literally turn the night into day."

Mark Dery

In *Discipline and Punish*, Foucault considered the instrumental use of optical technologies by disciplinary societies, a "physico-political" technique he predicted would lead to a state of unremitting surveillance. Foucault termed this phenomenon "panopticism," after the

JOHN BORRUSO


TICISM IN THE AGE OF TOTALLY HIDDEN VIDEO



institution set forth by Jeremy Bentham in *Panopticon* (1791). Bentham, an 18th century English philosopher of the Utilitarian school, conceived of a revolutionary prison consisting of a cylindrical framework ("an iron cage") whose cells, rising tier upon tier, gave on a central courtyard dominated by an observation tower. Sunlight, streaming through the open-ended cells and pouring down from a skylight in the annular building, would turn each prisoner into a dramatically-backlit figure whose merest movement could easily be seen. The warders would disappear behind an elaborate system of blinds, partitions, and zig-zag openings designed to prevent light or shadow from betraying their presence.

The Panopticon—whose name derives from a Greek word meaning "all-seeing"—accomplished multiple miracles with the simplest of means: optics, geometry and architecture. It facilitated the management of the many by a centralized few—or one, or none, since the incarcerated had no way of knowing precisely when the overseers were at their posts and therefore had to assume that they were being spied on at all times. Thus was the machinery of power automated and the feudal dungeon, with its chains, locks, and impenetrable gloom—a welcome cloak to scheming prisoners—rendered obsolete.

The Panopticon prefigured Le Corbusier's regimented, modernist "machines for living" as well as the modular chicken coop architecture of the Levittowns of the 1950's. It is prototypical of the modern office, factory, asylum, schoolhouse, penitentiary, and any other conspiracy of the architectural and the optical to create a space in which behavior modification is effected through unremitting surveillance.

The Panopticon, to Foucault, is ultimately "a figure of political technology that may and must be detached from any specific use." It threatens to spread, virus-like, throughout the social body—an infestation, which Foucault evoked in a marvelously French phrase, "the swarming of disciplinary mechanisms." It marks the "de-institutionalization" of control apparatuses which will "emerge from the closed fortresses in which they once functioned and... circulate in a 'free' state."

Bentham's dream of "a network of mechanisms that would be everywhere and always alert, running through society without interruption in space or in time" comes true in an image world whose inhabitants have internalized the paranoid psychology of high-tech panopticism. As one of DeLillo's characters observes, in *Running Dog*: "When technology reaches a certain level, people begin to feel like criminals... someone is after you, the computers maybe, the machine-police. The facts about you and your whole existence have been collected... It's the presence alone, the very fact... of technology, that makes us feel we're committing crimes."

Panopticism, in a cybernetic society, has given rise to a culture of retinal fetishism in which scopophilia, voyeurism, narcissism, and what might be called technommetaphobia (fear of inhuman eyes) are everywhere in evidence. These obsessions and neuroses percolate through mass psychology, in the current mania for amateur porn that affords a peephole into the Joneses' bedroom; in *Totally Hidden Video* and *Candid Camera*, both of which turn covert operations into practical jokes (and vice versa); and in *I Witness Video*, a show that airs news footage shot by junior Zapruders. During commercial breaks, children are beguiled by ads for Nintendo's Superscope 6, a video game-cum-spyglass that seems to belong in *1984* ("Hardly a week passed in which the *Times* did not carry a paragraph describing how some eavesdropping little sneak... had denounced his parents to the Thought Police"). At the video store, their parents browse through titles such as *Night Eyes*, a trashy thriller about a surveillance expert seduced by his subject, or *Manhunter*, the prequel to *Silence of the Lambs*.

Manhunter is about watching and being watched, sight and blindness, time stopped with a twitch of the trigger finger or a click of

the shutter. Based on *Red Dragon*, by Thomas Harris, it follows the trail of a Blakean psycho in search of a fiery apotheosis. Nestling shards of broken mirror in the eye sockets of his victims, the killer sees himself transformed from a gangling creature into a radiant being in the soulless silver windows of their eyes. The film is a bravura improvisation on the counterpointed themes of narcissism, voyeurism, and the homicidal gaze mediated by technology. The authorities bring to bear a daunting technological arsenal—microscopes, scanners, lasers, black light—in their pursuit of the murderer, who works in a film processing lab and photographs his grisly tableaux using infra-red film.

Surveillance culture is reflected and refracted more frighteningly by Gary Rattray, the Queens youth who coolly operated a video camera while a friend ripped a gold chain off another teenager's neck and kicked him repeatedly. The dominant aesthetic in Rattray's 45-second tape is home movie-meets-"gangsta" fantasy. At one point, when the victim is lying in a foetal crouch, a bystander leaps into the frame and grins; the video ends with a closeup of the victim's stunned face. According to a *New York Times* reporter, Rattray told investigators that he "just likes to videotape things."

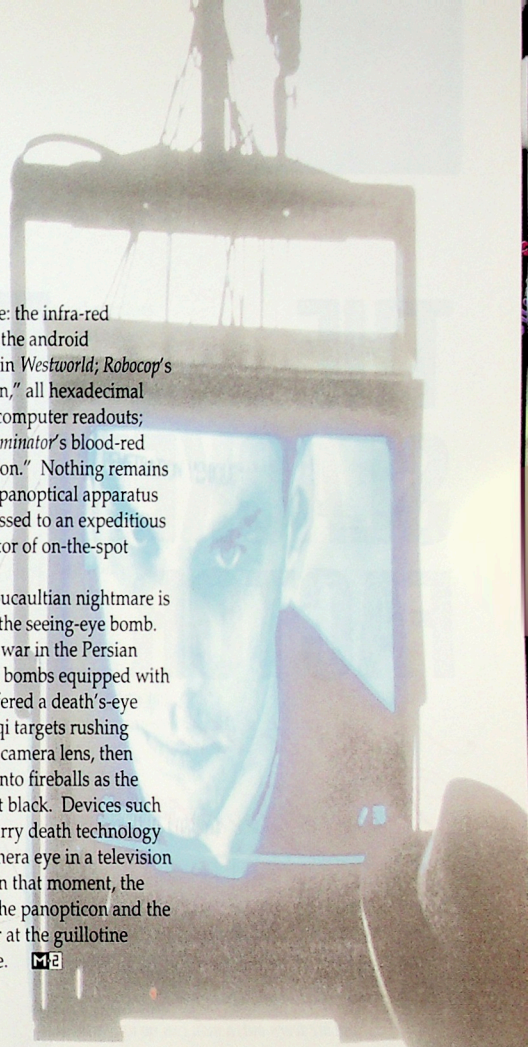
Rattray, who witnessed an act of supreme ugliness with yawning indifference, is the curious product of panopticism: a man who has turned himself into a surveillance camera. He regards and records but does not see, in the sense of moral discernment. Seeing in a carceral culture, is a privilege reserved for the unseen—the warders, from whose vantage point the larger societal picture is apparent.

At the end of the twentieth century, nothing recedes like reality. Events are experienced at a far remove, mediated by communications technologies in which the assumed perspective is that of the snooperscope, the prying electronic eye. Our evenings are haunted by panoptic imagery: the flickering apparitions of ski-masked bank robbers, captured by hidden cameras and shown on the evening news; the shadowy figures of drug dealers running from camera lights on the TV show *Cops*.

As the title of Foucault's book *Surveiller et Punir* suggests, the one-sided gaze is inherently aggressive. "One of the most uncanny and widespread forms of superstition is the dread of the evil eye," wrote Freud, in "The 'Uncanny'" (1919). It is recorded in the New Testament—"From within, out of the heart of men, proceed evil thoughts... an evil eye," writes the apostle, in Mark 7:22—and Christ himself uses a malefic glare to wither a fig tree, in Matthew 21:19. Freud relates this belief to "that principle in the mind which I have called 'the omnipotence of thoughts'... the old, animistic conception of the universe, which was characterized by... the narcissistic overestimation of subjective mental processes." Which leads us back to Foucault, in a roundabout way: "Without any physical instrument other than architecture and geometry, [the Panopticon] acts directly on individuals; it gives 'power of mind over mind.'"

The cyberoptic Evil Eye, conflating surveillance and punishment, has existed for some time in pop culture, in the cinematic cliché of the robotic gaze: the infra-red eyesight of the android gunslinger in *Westworld*; *Robocop*'s "Robovision," all hexadecimal codes and computer readouts; and the *Terminator*'s blood-red "Termovision." Nothing remains but for the panoptical apparatus to be harnessed to an expeditious administrator of on-the-spot justice.

This Foucaultian nightmare is realized in the seeing-eye bomb. During the war in the Persian Gulf, smart bombs equipped with cameras offered a death's-eye view of Iraqi targets rushing toward the camera lens, then exploding into fireballs as the screen went black. Devices such as these marry death technology and the camera eye in a television that kills. In that moment, the warder in the panopticon and the executioner at the guillotine become one.



Mark Dery is a cultural critic whose writings have appeared in The New York Times, The South Atlantic Quarterly, *and* Semiotext(e). *He is currently at work on* Cyberculture: Road Warriors, Console Cowboys and the Silicon Underground, *a survey of cybernetic subcultures. He may be reached as markdery on The WELL.*

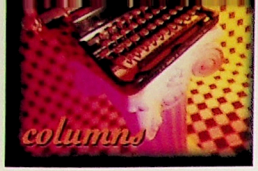
Bibliography

Mike Davis, *City of Quartz: Excavating the Future in Los Angeles* (New York: Vintage, 1992).
Don DeLillo, *The Names* (New York: Knopf, 1982).
Don DeLillo, *Running Dog* (New York: Knopf, 1978).
Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1977).
Sigmund Freud, "The 'Uncanny,'" in *On Creativity and the Unconscious* (New York: Harper & Row, 1958).

Further Reading

(Available from Loompanics Unlimited, P.O. Box 1197, Port Townsend, WA 98368).
Scott French, *The Big Brother Game.*
William B. Moran, *Covert Surveillance and Electronic Penetration.*
Frank J. Donner, *The Age of Surveillance: The Aims and Methods of America's Political Intelligence System.*

JULIA SCHERR



THE SLACKER FACTOR

Notes to the Twentynothing

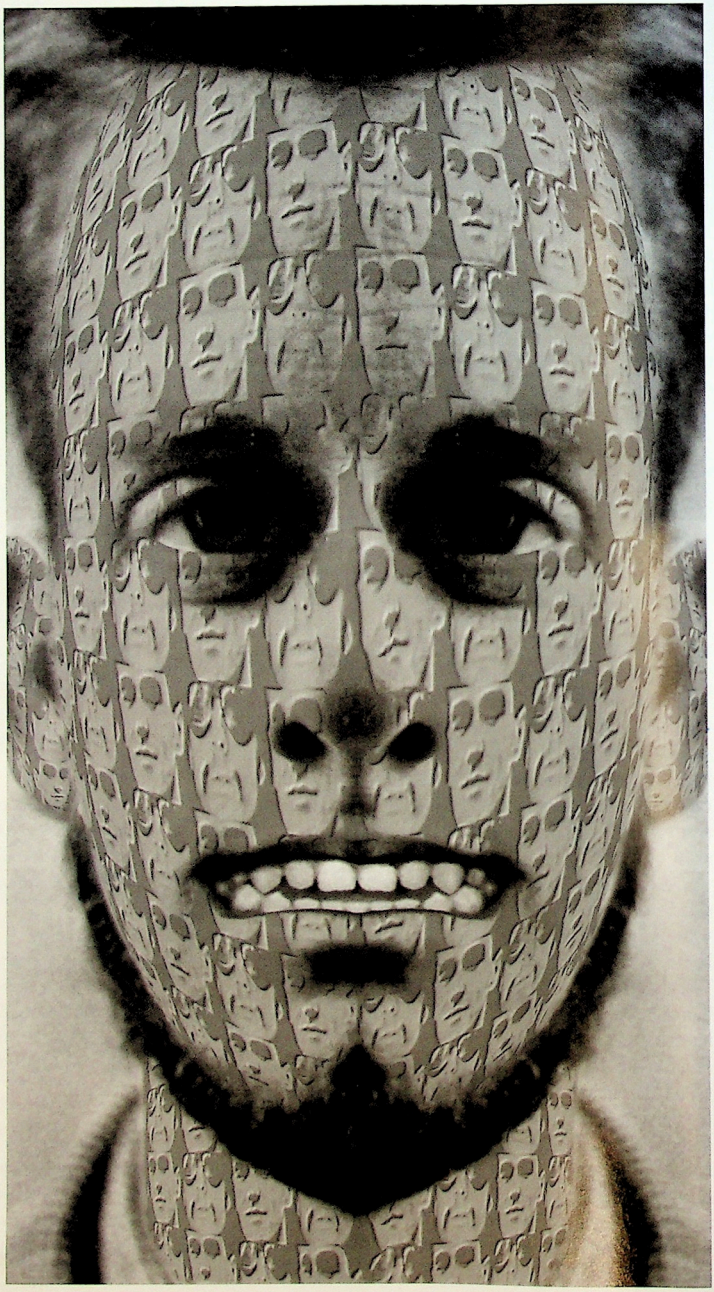
We are living at an important and fruitful moment now, for it is clear to men that the images of adult manhood given by popular culture are worn out; a man can no longer depend on them.

—Robert Bly

Do I look like a motherfuckin' role model?

—Ice Cube

Andrew Hultkrans



JOHN BORRUSO

The Boomers have Robert Bly. When they're feeling flaccid, they can commune at pricey men's retreats and reclaim that elusive "inner child." Indeed. Did these people ever *lose* that inner child? This is the freewheelin', joint smokin', acid droppin', countercultural, Oliver Stoned *Sixties* generation we're talking about. Hell, I can get in touch with *their* inner child for $29.95 by ordering Time/Life's *Classic 60's Rock*.

Look, if these guys are turning to academic homunculi like Bly to regain their manhood, to find their "Wild Man," it doesn't bode too well for us male twentynothings. And if it's true that this "softening" of men began with the women's movement, we're definitely crème brûlée. Do we have to hug trees to get to the Alan Alda zone, or what?

Today's self-doubting Boomer male has options

What are these guys kvetching about anyway? Today's self-doubting Boomer male has *options*. He can commiserate with his "brothers" over disparaging images of men in advertising by watching *Stale Roles and Tight Buns*. Or channel his ancestors with the help of Shepherd Bliss [*sic!*], who claims Pan, Shiva and St. Francis are his "buddies." Or discuss the devastating effects of circumcision on the male psyche: "For all of us who were cut when us and mother and world were still synonymous, the *vagina dentata* is a concrete reality" (Richard Newman). What more could a guy ask for? Boomers have their houses, Saabs, VH-1, and all the spiritual reassurance money can buy. What have us Slackers got?

Slacker males face their future with a chunk of cynicism on their shoulders, like Robert Conrad in his legendary Duracell commercial: "Go ahead... Knock it off... I dare ya." Nothing's shocking... save the ever-widening rift between our own narcotized sensibilities and the baffling persistence of any kind of public morality. To wit, the only remarkable thing about the Geto Boys is someone else's need to censor their work. A dearth of employment opportunity accompanies a dearth of inspiration. That Bret Easton Ellis (*Less than Psycho, American Zero*) is our first author of note should say it all.

As the Help Yourself generation above us morphs into the Self Help generation, they leave a legacy of failed models: hippie, yippie, wimpy, and yuppie (the 4 Dwarves of the Apocalypse)—none applicable to the average Slacker. Sure, we looked at 'em (like Mikey, we'll try *anything*), but none seemed likely to help along our individuation process. Or usher us into manhood. Whatever that is.

Bly'd say we need mentors *big time*. And he may have a point. But who qualifies? We need *choices*. At least two. One who would do for our Wild Man, and maybe a spare, who could validate our introspection. For the latter, how's this for a recommendation: "[He] is a paradigm of a certain kind of ethereal, inhibited masculinity that would rather live in dreams than risk being disappointed by reality... [He] invests his emotion in pristine idols, preferably dead, like James Dean, rather than deal with the mess and awkwardness of any real close encounter" (Simon Reynolds). Sound familiar? This is the man who has given voice to our peculiar neuroses and has attached them to a literary tradition. None other than Morrissey—patron saint of miserabilism.

For you effete intellectuals, you budding Bartlebys, Morrissey's the man to lead you from eyeliner to adulthood. A Byronic poet, a supreme empath, a man so in touch with his grief he's made a recording career out of it. He's constructed a world of self-absorbed misery which you can adopt as your own. He'll eloquently justify your withdrawal from society, and then introduce you to a community of like-minded youth—his fans! Thousands of pale, weedy Brit boys who feel *just like you*, but who you don't have to actually meet. For $19.95 you can watch them from the safety of your own home—on the video compilation, *Hulmerist*.

On the other hand, if that fire in your belly runs on equal parts testosterone and T-Bird, scuzz-

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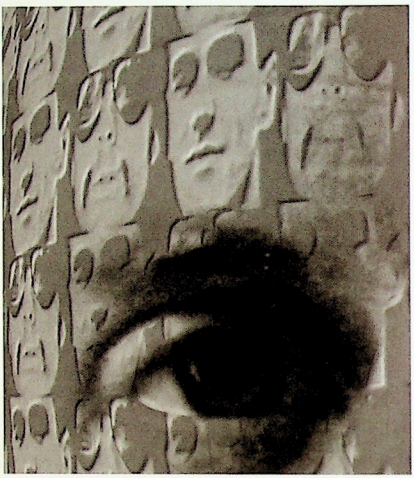


rocker GG Allin is the wildman for you. The human juggernaut who claims to live "ten years in every one," Allin is an assault. Often plunging a microphone deep into his ass to prove his point, he observes no limits—onstage or off. He can help you channel your rage into a personal revolution. If you're a young gun waiting to go off, GG will enable you to take aim and fire. The self-declared "Public Animal #1," Allin is Bly's Wild Man updated for the 90's. Having vowed to tour until he self-destructs onstage, he is a mentor for those who embrace commitment above all.

Although these two men are mentors for the millennium, they do share qualities with traditional male mentors of the Bly school. Bly recites poetry to his disciples accompanied by his own zither. Our mentors also instruct through song. Their *dis*-similarity, however, is interesting. Where Morrissey is literate, Allin is ill. Allin's songs—with titles like "Scars on my Body/Scabs on my Dick," "Suck my Ass It Smells," and "Be my Fucking Whore"—exhaust every permutation of "fucker" and "mother" to articulate his personal problems. Morrissey exhumes Oscar Wilde and drops precious literary puns like *Hulmerist* (Clue: Hulme's "l" is silent).

Bly maintains that a young man cannot achieve true manhood without enduring a period of "ashes" work—in other words, shit work. Both Allin and Morrissey take shit seriously, but in different ways. Allin shits onstage and throws it at his audience, his avowed enemy. Morrissey seems to be saying "Give *me* your shit, I'll keep it with mine. And don't throw it; handle it gently, lovingly."

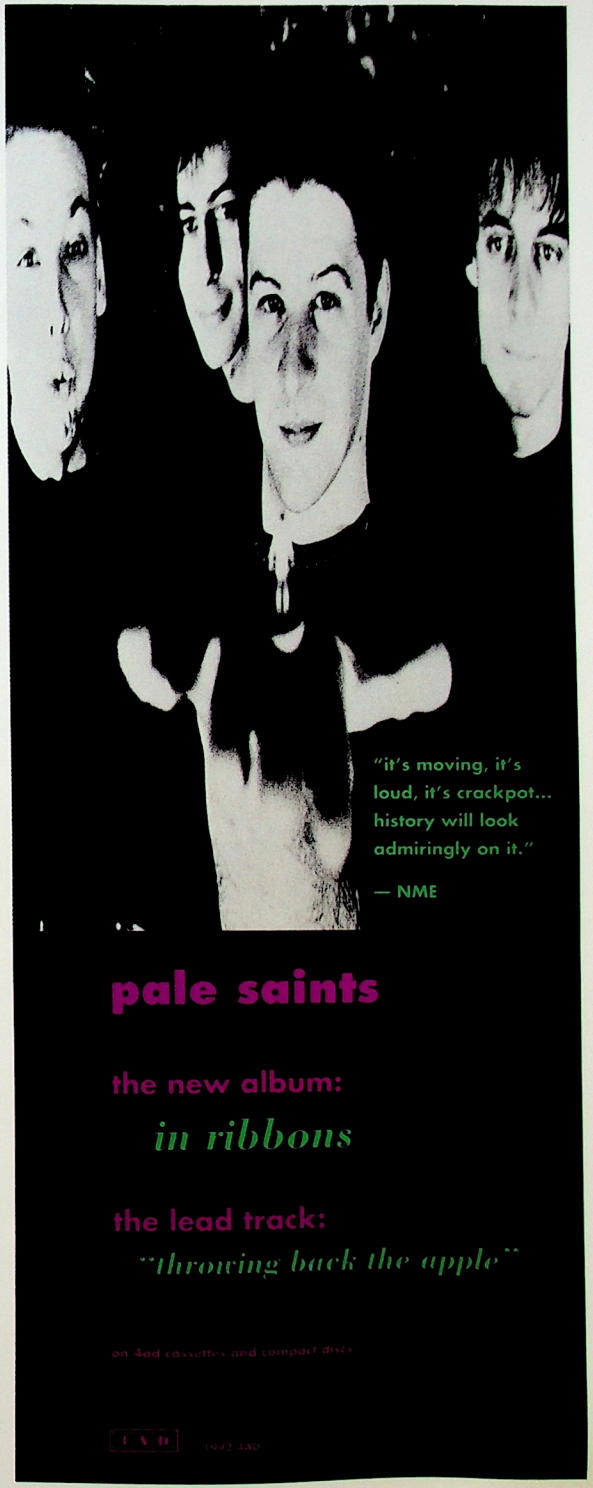
Bly's mentor is a man who has faced up to his shame and eradicated it, enabling him to help a young man do the same. GG demonstrates utter lack of shame: "I don't fuckin' care if people know I had sex with my brother or my dog. I'm an ugly scum and I don't care." Bly notes the absence of the Inner King in modern man and a consequent erosion of purpose. He simply "doesn't know if he has the right

to decide even how to spend the day." Not so Allin: "Until they put me in a box 6 feet under, I'll continue to fuckin' *do it my way*."

Bly's initiation process involves getting in touch with one's Inner King. Both Allin's and Morrissey's lyrics reveal an awareness of their symbolic birthrights. Morrissey bleats these lines to open *the* Smiths song, "How Soon is Now?"—"I am the son and the heir/of a shyness that is criminally vulgar/I am the son-and-heir/of nothing in particular." Elemental punning aside, Morrissey describes his fate in terms of royal ascension. So Allin, who, in addition to creating rock 'n' roll from the womb during 1955-56, boasts of siring "The King" himself—Elvis Presley. In Blyist terms, then, Allin is the Great King within each of us—father of all earthly Kings.

Alternately, Allin can be seen as the caged Wild Man. Allin maintains, in an interview from prison, that society locks him up because it "fears his reality." Further parallels exist. At the conclusion of the Grimms' tale of "Iron John," the hairy Wild Man who has served as a mentor to the young hero arrives at the kid's wedding—all shaved and spiffy—in the form of a "baronial King," and announces that he is Iron John, the Wild Man in his true form, and that the boy's growth has allowed him to break an ancient spell and reclaim his Kingship. In a prison polemic entitled "The GG Allin Mission," Allin declares: "I'm here to take rock 'n' roll back and prove to the world that I am the real King through the powers I have acquired." Indeed, the remainder of the "Mission" is devoted to "what you should do" as a GG Allin disciple to overthrow the corporate rock hegemony, and by extension, society itself.

If either of these men resonate within you... follow! They will initiate you into the unimaginable, 'til now, mystery of adult manhood. Whether you choose the inner or outer path is up to you. For you budding personal politicos, there's another forked path—Michael ("That's me in the corner... Oh, now I've said too much") Stipe and Ice ("Do I *look* like a motherfuckin' role model?") Cube. But that's another column.



XOCHI SPEAKS

Flower Power for the Nineties

Dennis J. McKenna

The publication of the "Xochi Speaks" poster very neatly and artistically fills an educational niche. It amounts to a quick crash course in the prototypical psychedelics, along with some very practical and down-to-earth advice on how to derive the most benefit from these substances, and how to avoid psychedelic short fall—or worse. The accompanying 16 page *Guide* introduces the initiate to neurotransmitter pharmacology and psychedelic taxonomy clearly and lucidly. There are sections on cross tolerance, metabolism, and nutritional support along with suggested readings.

The poster shows Xochipili, the Aztec god of Flowers, with his ecstatic gaze turned to the heavens, where twelve of the major psychedelic molecules are arrayed in an arc. At the top of the poster, each molecule is rendered as a conventional structural diagram, with its chemical and pharmacological classification ("entheogen" or "entactogen"), dose, duration of action, effects, side-effects, contraindications, and context, i.e., comments as to the appropriate set and setting. One might quibble somewhat with some of the terminology but basically the information is accurate, and well presented. Anyone who plans on using any of these or related substances should read and digest it thoroughly; it could save your life. As to the minor quibbles, here are a couple: I would not classify DOB as an "entactogen" as pharmacologically it is practically the prototype for the post-synaptic, 5-HT_2 agonist type hallucinogen. And the term "entheogen" merely adds to the needless proliferation of terms in a field that is already glutted; what's wrong with good old "psychedelic?"

The graphic quality of the poster is stunning, and here the artist has outdone himself. As one who is used to dealing with the more conventional "chickenwire" structural diagrams, it was refreshing to see them depicted here as space-filling models, which is closer to what they might actually look like. They resemble little, plastic, brightly colored nanomachines, which is exactly what they are: nanotech keys for unlocking the doorways to higher consciousness. In this depiction, one can more easily appreciate how similar they really are, and perhaps marvel at the subtlety of nature; rearrange a methoxy here, insert an indole there, and you get a completely different set of effects, potency, duration, etc., yet all, somehow, somewhere in the psychedelic spectrum.

Perhaps it is this ineffable mystery of nature that Xochipili is contemplating as he turns his rapt gaze skyward. At any rate, it's clear that he's just beamed in from *some* kind of hyperdimensional Other, because his image is still quantized, as though frozen in the act of molecular condensation; you can practically still smell the faint, sweet-tangy odor of fused beryllium (or is that an indole?).

In short, this poster deserves a place on the wall of anyone with an interest in psychedelics, whether personal or professional, and it should be consulted frequently by aspiring psychonauts prior to any contemplated lift-off.

"It is the world of your own soul that you seek. Only within yourself exists that other reality for which you long. I can give you nothing that has not already its being within yourself. I can throw open to you no picture gallery but your own soul. All I can give you is the opportunity, the impulse, the key. I can help you to make your own world visible. That is all."

—Hermann Hesse, Steppenwolf

The full-color poster, Xochi Speaks, *accompanied by the sixteen page* Guide to the Psychedelics *is available for $25 ppd. from Lord Nose!, P.O. Box 170473M, San Francisco, CA 94117.*

Dennis McKenna, Ph.D. is a longtime researcher in ethnobotany and neuropharmacology. He is Terence McKenna's credentialed brother with whom he wrote the cult classic The Invisible Landscape *in 1975. Since then they have busied themselves rescuing Amazonian flora from extinction under the aegis of Botanical Dimensions, a botanical preserve in Hawaii. Formerly affiliated with Stanford & the NIMH, he now heads a pharmaceutical R&D company called Shaman, Inc.*

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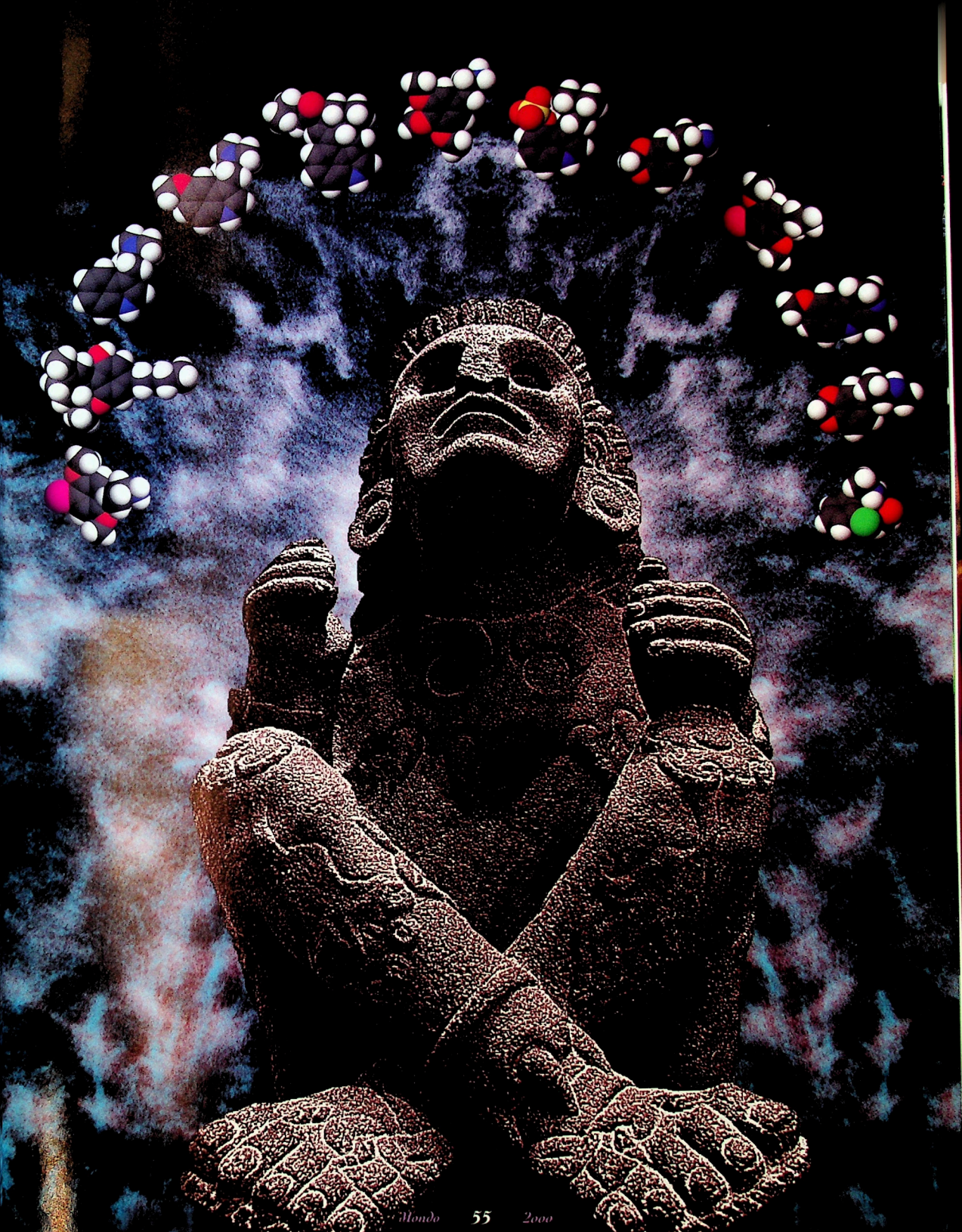

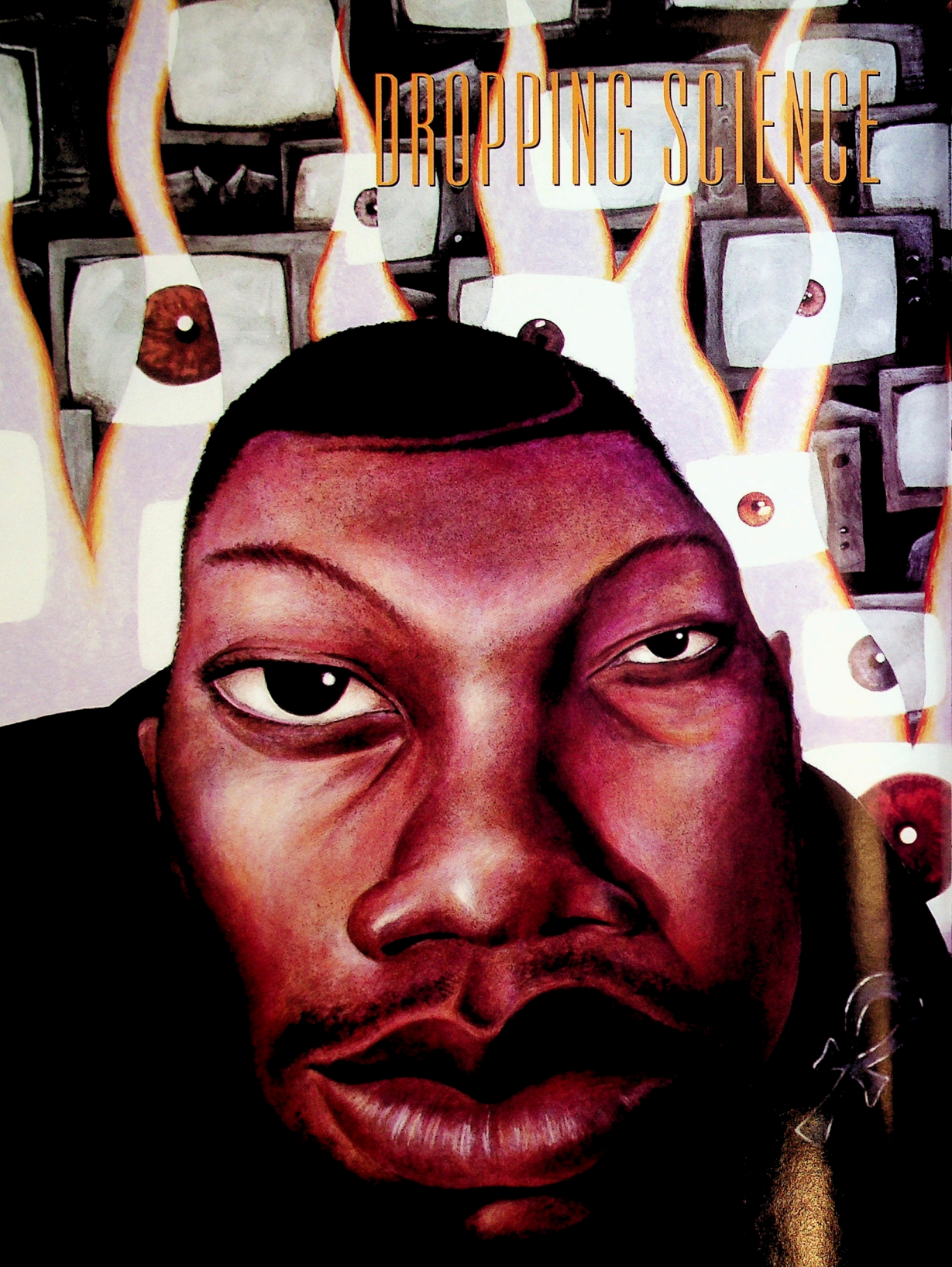
DROPPING SCIENCE

BLASTMASTER KRS-ONE SPEAKS

ERIC WHITE

"Were you sleeping?"

It's 9:00 a.m. and, though he knew I'd be calling, KRS-ONE sounds completely disoriented.

"Noooo," he groans, but I think he's just being polite. The man has every reason to be frayed. The past seven days have been a blur of airports, college halls, kiwi-and-Evian receptions, and giddy student programmers.

For the past two years, rap's tenured professor has taken his solo discourse on the road to wake up the youth of America. Now, it's up to me to revive the teacher before he heads off for another speech.

I explain MONDO. *He livens at the word "revolutionary."*

Seven years ago, Lawrence Krsna Parker was sleeping in the streets of Manhattan. A runaway at 13, Parker spent his days seeking shelter and knowledge at the New York Public Library. He wanted to learn "the lies." Everything he had been told about history, philosophy, and music was deceit. "School was not it. Home was not it." Educating himself was the only solution.

At the Bronx Franklin Shelter, KRS-ONE hooked up with Scott Sterling, aka Scott La Rock, a counselor hip to the emerging power of rap. Together, they formed Boogie Down Productions (BDP), an uncompromising, sucker-slamming, truth machine. Their album Criminal Minded *ripped through the streets as rap's premier rebel essay.*

When La Rock was innocently shot and killed a few months later, KRS-ONE dedicated himself to the uplifting of humanity. "I'm concerned about the kids who don't know what time it is," he said. "I want to show them that there are different ways to be radical."

What followed were three of hip hop's funkiest, most conscious LPs. By All Means Necessary *launched a crusade against black-on-black crime with "Stop the Violence," a song and a movement that raised over a half million dollars for the National Urban League.* Ghetto Music: The Blueprint of Hip Hop *reinterpreted the Bible.* Edutainment *rallied for vegetarianism, improved education, and Afrocentricity.*

Along the way, he's collaborated with R.E.M., Ziggy Marley, and Jonathan Demme. His all-star rap effort HEAL *(Human Education Against Lies) is still earning money to help abolish illiteracy in the inner cities. Now comes* Sex and Violence, *in which "the allmightee blastmaster KRS-ONE settles the score." Stay tuned.*

Listen up class—KRS-ONE is wide awake and wants you to join him.

—Dave Kushner

David Kushner

MONDO 2000: What's the concept behind the lecture tour? What can you achieve through lectures that you can't achieve in concert or on record?

KRS-ONE: It's a totally different experience. My albums would be spoken word if I had my way. But as a recording artist, you must add a little music. [*Laughs*] Unfortunately, you can only speak for five minutes per section of music, and the music has to change. With lectures, I'm able to speak for two hours without music. They give me a chance to explain myself to those who might not get what KRS-ONE is about.

My views vary according to the lecture. I wrote a lecture called "Sleep Techniques," then there was "Civilization vs. Technology," and "HEAL Yourself." This is a Black History Month lecture where I'm urging respect for our ancestors and their teachings so that we won't repeat the same mistakes. This goes for all races and cultures.

The first lecture—"Sleep Techniques: Ways of Opening and Waking Up Your Mind" deals with educational and religious systems cutting off the minds of people—forcing people to believe and memorize rather than intellectualize and feel. We say that if you're not asking any questions, then you're not an intellectual.

JOYSTICK POLITICS

M2: How about "Civilization vs. Technology?"

KRS-ONE: That's about trying to move away from barbarism. Trying to find civilization, to define it, and then act civilized. Many people think technology *is* civilization, which is a blatant lie. We have to determine what civilization is, who are its thieves, what makes a barbarian a barbarian, and what makes one civilized? And what is technology? Is it positive or negative? This lecture is for re-ëvolution. Not revolution, but re-ëvolution. It's about rebuilding humanity. Civilization is dying, technology is rising, which means we're becoming robots. Who has the remote control? That's my whole point. Who's guiding these robots around?

M2: What would you consider to be positive technology?

KRS-ONE: Technology that's controlled by the person who created it. Negative technology controls its creator.

M2: Have you seen virtual reality? It's an elaborate apparatus that allows the user to step "inside" the computer and participate in an artificial environment. By wearing these goggles you're immersed in a computer world. It's like stepping inside a sophisticated video game.

KRS-ONE: Oh shit! [*Laughs*]

M2: It's absolutely going to revolutionize entertainment, and God knows what else.

KRS-ONE: Oh yeah, I can imagine.

M2: We're talking about things like virtual sex...

KRS-ONE: MMM-mmmmmmm.

M2: All kinds of wild shit.

KRS-ONE: Damn, that's fresh!

M2: It sounds like some of the stuff you're talking about.

KRS-ONE: That could be a positive and entertaining technology. Of course, some greedy technologician [*laughs*] is going to come up with a newer, better and faster way of destroying with it. You know, "Let's add some people in here, and what would it be like if you could just *off* certain people."

BRING THE NEWZ

M2: You've said "Rap is a revolutionary tool for changing racist America." Do you think it's working?

KRS-ONE: Oh yeah! Rap music has brought together potential Klansmen and women and turned them into the basic rap audience. I don't think we could have ever had a Public Enemy in the history of music, *period*, other than through the vehicle of rap. Rock 'n' roll brought us some revolutionary speakers, but not a Public Enemy—not a group that directly involves itself in Islam *and* is on a pop level.

Rap music brings people together. White people, black people, everybody can get off on certain beats and lyrics that don't exist in rock, country, gospel, jazz, etc. I think rap music is on the forefront of bringing people together. This is how it can change the structure of racist America: it teaches kids that "Your father and mother are your father and mother and should be respected, *but here's what they've done.* Do you want to perpetuate the myth of this great America... blah, blah, blah, or do you want to change things?" Most kids growing up now want to see things changed.

M2: You're talking about rap's power as an information network. People tune in to CNN to get turned on to what's going on in the world. Rap, you're saying, is a just as powerful an information network.

KRS-ONE: Right! As a matter of fact, it's *more* powerful, because they're speaking a language kids understand. Whereas CNN speaks a foreign language, rap hits directly.

M2: How do you think, especially with hardcore rap, this communication network is expanding? Or is it expanding?

KRS-ONE: It's expanding, it's moving forward, but it's in desperate need of some new ideas in terms of communication. Rappers have to communicate through other means also. Not only though music, television and radio, but also through books, lectures, through ways that I can't even think of. Rappers have to come up with newer ways to communicate so they can compete with other industries. It's a constant fight to get into the public's head, 'cause you usually do it through television or radio.

There has to be another form of communication. Rap music on television and radio is not rap music, it's something else. Rap music is something that you're supposed to see for free or for cheap. Rap music is something that only talks to a specific group of people. Everyone else is looking in on that conversation. You can debate that, but rap music basically speaks to ghetto-conscious people—no matter what color they are. It's speaks to the kid in the inner city who has to get on the train and bus, go to school with a gun, listen to the teacher lie, go home, Mom's got chores... You know, the average American kid.

SAMPLE THIS: MY PIT BULL

M2: What do you think about the latest innovations in sampling, like the sonic chaos Public Enemy is producing to evoke the urban landscape? How do you think it fits into the tactics for getting inside heads efficiently?

KRS-ONE: It's always a controversy with rap music. People turn to the controversy all the time. People want to know who's the underdog, who's getting dissed this week. Rap music turns people's heads around. Anytime a rapper puts out an album, they're a controversial artist. It makes people look. Now with sampling and so on, it also makes people, as they look, remember and say "Ooohh wow, rap music." I would agree that rap is not music. Rap is a rebellious form of technology. It's people leading technology—that's what it's about.

I *personally* would call it music, but in the scheme of what's being called music, rap isn't music. The reason I bring this out is because rap music is all about computers and samples nowadays. It used to be about a live band, but the live band couldn't cut it, because that wasn't what rap was originally. Even before the live band, rap music was about two turntables and a mixer. That always got people's attention. You could always throw on a record that was already a hit and make it more of a hit by rapping on it. That's what draws people's attention to rap music more than any other music, because it's a rebel music. It blatantly takes from someone else.

It's funny how early rock 'n' rollers stole from black people doing rock music. They say they "borrowed" or "mimicked" the style, but I call it theft. When you steal music from people who don't know music law—cannot defend themselves properly—what then happens is, when we come and sample the same stolen rock 'n' roll music, they have the ability to sue us. This is where the sampling laws instantly become bogus. If there was really an infringement on copyright, we would've started clean from day one. Rap music is making people aware that everything they're getting is stolen—a technological remake. You either create something new or keep listening to the same old thing. What most people decided to do was listen to the same old thing. So rap music becomes the wave of the future, 'cause it's never the same old thing.

M2: But this high-speed blending where everything's almost indistinguishable—this screaming sonic blast...

KRS-ONE: Rap is an extreme music, like rock 'n' roll was, like gospel was. Like any music that started out hardcore. All these high-pitched sounds with people screaming at you and music screaming at you... it's just a reflection of society, how people really feel.

M2: Should rap become even more political than it is now?

KRS-ONE: I don't know. It's like saying rap should become more commercial. I think rap should be more *diverse*. I think maybe we should give rise to a Japanese rapper talking about the politics of Japan.

PYTHAGORAS & THEM

M2: Rap has always had a certain DIY revolutionary ethos. How do you account for it's self-sufficiency?

KRS-ONE: Anyone can rap. Anyone can do music. But because we're under the Pythagorean theory of music, millions of people are kept out. Why? Some guy might have gone "Whoa whoa whoa whoa whoa whoa whoa" to an offbeat on the table and somebody else might have laughed at him. "You'll never be a Diana Ross." And, whoop, he's gone. That might have been a new style. But this society we're under—it doesn't spark intelligence, it gives you knowledge. And again, I think knowledge without intelligence is mental slavery, mental dictatorship, addiction.

M2: So, given all this, what do you think is the meaning of life?

KRS-ONE: [*Laughs*] The meaning of life is to master it. To master every emotion. To balance the inner with the outer. To balance thought with matter. This whole society will be extinct in a couple of years. A new society will arise. This whole thing we call humanity will fade away. The sea life or insects have it next, I think, or a mutation of the two. Maybe the ants have it next. M2

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The Red Hot Chili Peppers get Shrunk

psychoanalysis & dental exams by David Turin

Fun is a major part of the Chili Peppers lexicon, but it's really just a synonym for the carpe diem immediacy they personify. We tried to play psychologist, but, being amateurs, got somewhat befuddled. To lay their souls bare, we decided to refrain from the normal dude-esque interview questions about tattoos and tube socks. We devised an interrogation method that aspired to equal their spontaneity: Rorschach tests, word associations, dream recountings, ghost stories and dental bite impressions. We sought to turn the interview into an art form that would match, not compromise, their art.

We surmised that theirs is the art of life—knowing how to hitch a million different rides to anywhere in every moment, disposing of the past so that the present, like a hedgehog's back, always bristles with points of access. Beyond that, it is up to the reader to assess the psycho-evidence.

In "Los Angeles: Capital of the Third World," David Reiff refers to Los Angeles as "America again… vulgar, naive, energetic, persuaded of its own special mission." If the Chili Peppers are seen as the demi-gods of this Los Angeles, they may interiorize current Los Angeles as well. Let's map some psychic freeways. Here you are… Three pink couches, splayed toward you—a Red Hot Chili Pepper stretched out on each one.

—David Turin

Photographs by Stephen Stickler

CHILLING RED INK BLOTS

MONDO 2000: Undt now for zee Rorschach tests...

[Rorschach ink blot tests are distributed]

RORSCHACHS FOR JOHN:

#1) That looks to me like... OH!!—never mind, it scared me too much. I can't tell you.

[Flea: Is it a little dog? John: I don't know.]

#2) That looks to me like an elephant making love to a men's glee club.

#3) That looks to me like two people eating a meat popsicle.

#4) It just gives me an apple-and-crumb feeling.

#5) Like a really ugly, ugly beautiful butterfly...

I see worms as being much bigger and more beautiful than human beings

RORSCHACHS FOR FLEA:

#1) Looks like two little kids playing and there's something evil underneath them.

#4) Again it looks like two kids that have something demonic going on. It's like these animals going down from the side of them.

#5) It looks like upside-down African priestesses.

#2) It looks like the inside of Bill Stobow's brain.

#3) It looks like people exchanging sexual fluids.

DREAMS

M2: This one looks like Mr. Toad from *The Wind and the Willows* praying, undt dis one looks like Snagglepuss flattened by a steamroller, I think. But that's all I need to know from these. Now to the next stage: dreams. What dreams have shaken your psyches? What are your most significant nocturnal illusions?

THE DISTINGUISHED FLEA: When I was younger, I had this recurring dream that I was possessed by the devil—totally out of control. The spirit told me that if I ever told anyone about the dream, I would really get *fucked*. For years I went around thinking "I won't tell, I won't tell, I won't tell."

M2: Shit!

FLEA: So I was always walking around in a daze—wanting to tell 'cause I was so scared, but never telling anybody.

M2: Funny, I had a dream that I was Christ. And you, John?

JOHN FRUSCIANTE: Nothing I feel is important.

ANTHONY KIEDIS: I have a couple of them. When I was five I used to have this nightmare that I'd be in the attic of an old mansion and up

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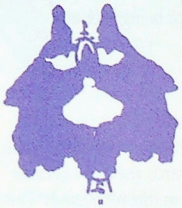
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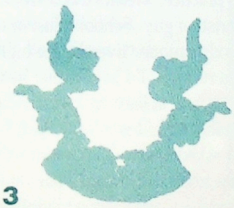
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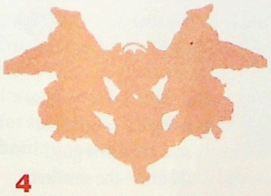
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on the ceiling beam there'd be this gnarly witch—born out of my infatuation with *The Wizard of Oz*—and she'd scare the shit out of me every night. I'd fall asleep and start dreaming about this witch. One day I said to myself, "I'm going to go to sleep and I'm going to tell that witch that I'm dreaming and she can't bother me." So I went to sleep and there she was up in the rafters. I looked up at her—a little five-year-old bambino—and I says "You can't touch me, you can't hurt me, you can't bother me, so you may as well give it up." And she went from her mad cackling, frightening thing to "Oh shit, the guy's hip to my game" and disappeared.

The other recurring dream I have is about Hillel [*Slovak—Chili Peppers guitarist who died of an overdose in 1989*]. He was my best friend in the world, and then he went and departed from this particular dimension. It's been evolving. Immediately after he died, it was the type of dream where you have no control over gravity or your body—very frightening. In these dreams, I'd walk into a room, he'd be there and I'd have no control over my body—I'd be floating around—a real sense of powerlessness. Then the dreams got progressively more friendly—to the point where Hillel would just be extremely healthy and vibrant looking—a look people are constantly striving for in this lifetime. I'd go up to him and say "Hillel, as far as everyone understands, you're dead." And he would say "Yeah, I know, but it's cool." It was very comforting.

M2: Does it seem like he's there?

ANTHONY: Yeah, he's definitely there. It's just an alternate reality, it's no less real than my speaking to you right now.

GHOSTS

M2: Ummmhmmmm... and when you were recording *Blood Sugar Sex Magik* in that reputedly haunted Hollywood mansion, did you see ghosts?

JOHN: There were ghosts everywhere.

ANTHONY: There were spirits. Late at night I'd walk into this room that nobody was staying in because it had the weirdest vibe. I'd intentionally walk into this cold, weird, dank room and hang out until all the hair on my body stood up and I got goose flesh chills. But John had an audible encounter with a female ghost, and Gus Van Sant—who was taking pictures of us—accidentally captured a ghost on film. There was this bridge connected to the house that the caretakers said was an active ectoplasmic point of the house. We forgot about it. One day Gus was taking pictures of us on the bridge and he said "Okay, I'm going to take some with a red lens." Flea's daughter Clara was walking around on the bridge with us, going "Daddy, who is that weird man?" And Flea would say "What weird man are you talking about?" and she would say "there" but there was no one there. We just thought she was tripping. She kept saying "Daddy, who is that weird man?" but we didn't think about it.

The photos that were taken with the red lens turned up with this floating, nebulous face. Totally unintentional. In the red picture on the back of the CD booklet, there's this weird head—some freaky ectoplasmic formation.

M2: Anthony, for you I think we should not do the Rorschachs, but should probe a little deeper inside zee noggin with some word association. Elephant...

ANTHONY: Titus.

M2: Dinosaur...

ANTHONY: The land that time forgot, Costa Rica.

M2: River...

ANTHONY: Phoenix.

M2: Malamute...

ANTHONY: Sleet.

M2: Gravy...

ANTHONY: Graveyard.

M2: Nefarious...

ANTHONY: Sex toy.

M2: Metamucil...

ANTHONY: The big duke squat mélange.

M2: Colon...

ANTHONY: Pipe.

M2: Murgatroyd...

ANTHONY: Mercury.

M2: Unctuous...

ANTHONY: Mother.

M2: Pivot...

ANTHONY: Did it.

M2: Bicycle...

ANTHONY: Ione. [*!!!*]

M2: Cow...

ANTHONY: Kiss.

M2: Mystery...

ANTHONY: Mustache.

M2: Fight...

ANTHONY: Silver ring.

M2: Munster...

ANTHONY: Scar.

M2: Cavity...

ANTHONY: Tracks.

M2: Missiles...

ANTHONY: Space.

M2: Cars...

ANTHONY: Foot.

M2: Tukhus...

ANTHONY: Ass.

FEAR

M2: Well, those are hard to permeate—a few too many leaves in the forest, a few too many gears in the machine. But we have noted it. Now we proceed as planned with the group session. First, some dental impressions to see if any parts of your psyches have stress-patterned themselves on your teeth. Please bite into these thin, pink waxy strips that are not dissimilar to baseball card bubblegum. Good. Now, what are your fears?

FLEA: Losing my creative drive. Getting AIDS.

M2: The thought of losing one's edge is bone-chilling. You can never know what drives you.
JOHN: You shouldn't *want* to know.
M2: The mystery of that edge makes it exciting and scary.
JOHN: I know what it is. It's insanity. Usually when I sense fear, I automatically see it as being an enemy of my creativity. But I just let it do its thing and don't fuck with it. I'm miserable for a while, but it's really not that bad. It starts to seem like a ridiculous little tick jumping on your arms and then it's easy to just… [*smashes imaginary tick against his arm*]. One of the coolest things I've ever heard is "Can you imagine a worm having a low opinion of itself?" I see worms as being much bigger and more beautiful than human beings. So to me, it's a really heavy statement. Would a worm have a low opinion of itself? It's ridiculous. A worm is a worm and it's there to do what it's doing. So as a human being, I take my cues from worms.
M2: So do you still feel as if your colon contains shit?
JOHN: There's so many terrible parts to me, but it's easy to fight them with creativity on your side and all those beautiful colors.

IDOLATRY

M2: Does idol worship ever get in the way?
FLEA: Personally, I think there's a lot of magic to having an idol. I always had idols. People that I loved so much because of their whole fucking trip, whether it was an athlete, a musician or anybody.
JOHN: I've never had anything like that. I don't like anybody.
FLEA: Meeting heroes can be pretty fucked. Last week I met Magic Johnson, who'd been my hero for years. I played in this MTV celebrity basketball tournament and he was there. He wouldn't even smile or look at me. Ignored me completely like I was vermin, like it would be bad for his image to be seen talking to me.
M2: What a shame—even after you went through all that trouble to record that song "Magic Johnson." You'd think he'd appreciate that.
FLEA: I'd think so. He knew who I was. I got the feeling he thought I was a real slimeball. I could be wrong. It could be just because I'd always envisioned him smiling at me or talking to me.
JOHN: I don't want to waste these people's time. Unless I felt like I had something to say to them, I have no desire to meet them. Like William Burroughs. He's inspiring to me but I have nothing to say to him.
M2: Are you feeling pressure from bigger venues and burgeoning fame?
FLEA: No. That's all part of the rock star game that we play. We don't get paid for being musicians, we get paid for being rock stars. Lame but true.

HIGH SCHOOL

M2: What, may I ask, was high school like?
FLEA: Anthony and I spent all our time causing trouble and being terrified of girls and people and stuff. Towards the end I became friends with Hillel and started to play bass in this rock band. Then people started to talk to me.
M2: Was high school a time of constant guitar practice for you, Captain John?
JOHN: Yeah. I started ditching school to practice. When I *was* there, I would read books and argue with this Christian guy. School is just one big humiliation. It totally Shiites on anybody unique. Even before high school, I knew I didn't ever want to have a real job. I'd have rather had a sugar daddy and gotten buttfucked all day and at least have been able to play my guitar, watch movies and read the books I wanted to read.
FLEA: I had a teacher in high school who asked everyone to write down three people they idolized on the blackboard and then went through each name and explained why it was a waste of time to idolize this person—what a meaningless idiot the person was. Except if the guy was like Napoleon—"Here's a guy, Napoleon, who really was great."
ANTHONY: I have great first memory of Flea. I'd just gone to Fairfax High School out of a different school district because I went to junior high in Westwood. I was using the address of Sonny Bono—one of my surrogate caretakers back then. When I got out of Emerson, I had a choice of going to Uni or to Fairfax. The first day I went to Uni they kicked me out. They got hip to my trip and found out I was using a fake address.

So I went to Fairfax and didn't know a single soul. The first guy I made friends with was the biggest underdog I could find—the smallest, most timid guy—someone I could easily protect. I befriended this guy named Tony Shore, who's about 4'3"—very humble and timid. Flea walked up to him one day at lunch time and grabbed him in a headlock and started giving him a nuggie. I didn't know at the time, but they had known each other for years. I went up to Flea and said "Take your hands off him before I hurt you." He looked at me like "Who *is* this guy?" The next thing I knew we were sitting next to each other in driver's ed class, where Mr. Hoolihan informed the class that if he found any marking on your desk you would be expelled from class. So I instantly set about marking up Flea's desk and he set about marking up mine—that's when we became friends.
JOHN: Schools produce the lowest common denominator, and that's what being a businessman is about, not what being an artist is about.

HISTORY & KIDSTORY

M2: I detect a certain resentment towards the education system which, no doubt, was formative in your development. What are your favorite periods of history ?

FLEA: I romanticize about different periods of history at different times. You know the period of history when Gumby and Pokey go into that book world? That's a great period of time. My biggest dream as a kid was to be able to do that.

JOHN: Of course, the best time is no time. I would have to say *Willy Wonka and the Chocolate Factory*.

M2: I'm a *James and the Giant Peach* man myself.

FLEA: Oh, I'm a big *James and the Giant Peach* fan! I love all of Roald Dahl's books. Not just his kid books. I read his books *now*.

M2: I wanted to be inside that peach so *badly*.

FLEA: It's great when the centipede had sore feet, remember, and had to unlace all his shoes.

M2: You like animals then.

FLEA: I love animals.

JOHN: I like them all, but I went through this period where I *said* I hated them. Because if people were hunting and saying they loved animals, I figured I *must've* hated them.

M2: Oh boy, we've hit psychological paydirt here. No doubt you committed vast pranks in high school. I would be interested—just for analytical purposes—in hearing one of them.

LIL' TOODLES

PRANKS

ANTHONY: I had a history teacher named Don Platt and for three years I was the top man in his class. My father, as much of an outlandish Hollywood playboy gangster as he was, was very concerned with my education. So I got straight A's in this guy's class. I was getting ready to go to UCLA, but I needed a recommendation. So I go to him and I say "Don, can I please have a recommendation to get into UCLA," and he says "Anybody who associates with Michael Peter Balzary—Flea—will not get a recommendation from me!" He had caught Flea cheating on a test, and knew we were best buddies. I was appalled.

So, I was in play production and I knew where they kept all the plastic letters for the marquee. So I stole boxes of letters, and the night before the last day of school Flea and I shimmied up the tall concrete obelisk and wrote on the marquee"Dandy Don Platt sucks anus." Everybody came to school to say good-bye and there was "Dandy Don Platt sucks anus." We had oiled the marquee so people couldn't get up there too easily. It stayed up there for several periods before the ROTC could figure out a way to get it down. We didn't leave it at that. Every six months for about two years we returned and wrote "Dandy Don Platt continues to suck anus."

RELIGION

M2: Can you compare music to religion?

FLEA: That would be a terrible insult to music. Music is this beautiful, universal thing for everyone and religion is about wars and shit like that.

JOHN: Religion is about dogma and separation. Music is about freedom.

FLEA: *Completely* different things.

JOHN: Whether it's a great religion or not, whether it's peaceful or not, you're saying somebody else isn't going to be blessed because they're different than you.

M2: What do the Chili Peppers have to do with the home of the brave?

FLEA: [*Drops to a whisper*] Actually, I don't know if we're so brave after all. M2

Bringing it all back House:

Off with the show— No more fucking rock'n'roll!

MICHAEL SWAINE

an interview with Fraser Clark

A RANT IN THE DARK

I tell you, it's getting so you see Bush on TV and wonder if it's the kid next door fooling about! All I can say is you guys from the MONDO *posse better know your cyber body/heart nets as well as your heads, or the whole Acid House YouthQuake over here—for whom your Deep Techno's starting to prove a strange attractor—is going to be in deep, deep shit. And they are definitely our planet's last chance!*

But don't worry! The Answer isn't only at hand—it's virtually in your feet!

—Fraser Clark

SCANNING BEYOND THE SPECS, SCRYING BEHIND THE SPECTACLE: THE SCREEN'S WITHIN THE SCENE

The word Zippy will make its first appearance in the Oxford English Dictionary next year. Coiner of the word (it's got nothing to do with cartoons or Yippies) and the initiator of the whole Zippy movement in Europe, is Scotsman Fraser Clark ("No 'e'—unless you're offering"). Clark, 48, Chief Buckstopper & Conceptualizer of evolution^ enterprises and publisher of Encyclopaedia Psychedelica International (epi, *pronounced like a Frenchman would say hippy) hopes the definition will say "Techno-Pagan," but is realistically prepared for something boring like "a late 20th century type of evolutionary committed to balancing the male and female hemispheres of his brain and general lifestyle."*

It's been a long haul from the first black & white volume of London's "ultimate Techno-Pagan Love fanzine" to the indescribable Acid Annual metazine evolution *with subscribers like "Acid House" bands KLF, The Shamen and Deee-Lite, and finally emerging as an international corporation involved in magazines, books, clubs, raves, Wisdom Weekenders, Love Labs, fashionwear, Ambient Lectures (called Playshops), and now records with Timothy Leary, Robert Anton Wilson, Terence McKenna, R.U. Sirius and Queen Mu.*

MONDO *decided it was time to check out the UK's only non-ageist "House posse," which many are calling—and not just themselves!—the underground heart & mind of the body of the British Acid House Scene.*

Be warned, though. This interview bridged two raves and an evening at Clark's Hampstead home. Though possessed of an Honours in Psychology from one of Britain's most ancient seats of learning, he dances as well—and nearly as much—as he talks, and often when he talks. So what are actually the broad outlines of a new way of perceiving and relating to our "cosmicultural" history and future fractals witchily and turbulently throughout the piece. Shit, now he's got me talking like him!

"I try to re-invent it all every time," says Fraser. "If you're living a real vision, it's always evolving. Formulas are like pokers up your ass—totally ruin your Dancing!"

—Mondo Connie

PLUGGING INTO THE INFO-CULTURE

MONDO 2000: So how did an old hippy...?

FRASER CLARK: *Zippy*, if you wanna categorize.

M2: ...*Zippy* like you first get involved in Acid House?

FC: Well, since the 80's, *epi* was predicting that in the final nanosec a whole new "consciousness craze" meme would combust out of Youth Culture that would swamp the genepool and save the planet (to mix metaphors!). The thing about Western culture—you know Gandhi's reply when they asked him what he thought about Western Culture? "Sounds like a good idea!"—well, our culture has until the year 2000 to totally alter direction, roughly from competition to cooperation, or it's curtains humanity. And nothing else but youth culture could mutate and spread a dominant new—not just meme—but *lifestyle*. It certainly wasn't gonna come from middleaged New Agers, now was it? Or Born-Agains!

M2: Zippies?

FC: Yeah, Hippy was the first mass wave of our culture's real potential, but most of them were locked in *We-Tried-For-Real-Change-And-IT-JUST-AIN'T-POSSIBLE* mode. It had to be Hitech-Hippy, a type who could roll his sleeves up and take over. "Zippy" was coldly selected as a cuddly media self-tag because Zippy, the Techno-Pagan, the New New Age Archaic Revivalist would have his horns deep embedded in the infoculture—*infoculture*—get that right, because I won't remember it! [*Laughter*]

M2: Which turned out to be Acid House?

FC: Without a scintilla of doubt, House Music is the sound of the 90's Zippy Youth Culture which'll be booming out of Peking and Baghdad juke boxes within 5 years. Moscow clubs still play Goth, MONDO's got Debbie Harry on its cover (what?!), yet there's already a thousand times more cognitively enhanced ravers in Britain than at the height of the Hippy or Punk things put together. This time it's going to be a successful eeevolution—it's got to be!

M2: But why Britain?

FC: We were always pretty sure about that. Why the Beatles last time? We argued about it all through the first Summer of Love (1988). London's the planet's heart chakra, and Acid definitely stimulates the higher emotional circuits. The music I mean—the drug's actually individualist and analytical—while the House drug 'e' is social and synthetic, synthesizing. Which is crucial to understand the spirit behind House. Rock'n'roll tears apart and House puts back together. Another reason is that, since the command-and-control-virus in Western Culture originally entered the system in Ancient Britain (and Europe), the antiviral revival must be initiated there too. So the Goddess starts her endgame in Britain, where nobody's looking, takes America and Japan by storm, then gets it broadcast from there to the whole planet. That's *smart*!

M2: You told me at the "Department of Experimental Philosophy" club that you guys weren't actually in it at the beginning?

FC: No way! And the fact that it was spawning for nearly 6 months round the corner from where we were predicting it is an indication of its real depth and truth. Old hippies didn't cook this up—they only predicted it. From the mouths of babes... how's it go? But as soon as the first raver danced into *epi*'s door (Martin Scooby, now art director of evolution^), we recognized it and bootstrapped in. And by embracing it, we could affect its development. Look, ever since they managed to blackball Hippy to death, the correct mode of Youth (as hope and conscience of the culture) has been systematically schizophrened from its historical roots. I bet it's even worse in the U.S. And we're talking about roots that go back through the punks, hippies, rebels, beats, bohemians, socialists, romantics, alchemists, the shakers and the quakers, witches, heretics and, right back in the roots, pagans. Yet the human spirit still revitalized itself! They wouldn't even let me on the fucking "youth programs" at first! Last summer our Dance Party Village got shot down by the official hippy Glastonbury Festival. But just six months later, Television South West hires our "Love Lab" to create a live rave on TV. That's how quick it goes when it goes.

M2: This is all a bit reminiscent of the original hippies. Didn't Leary predict that cows would graze on Times Square by 1970?

personal computers! Until now, just when the Roman Christian Monotheistic Mind State reaches out to grasp the whole planet by the short hairs, the Alternative Culture births itself. Biggest mistake Monotheism ever made, heh heh. All hegemonies take note. It's nonstop degeneration once you let folks off the divine gold standard. But rejoice, fellow freedom-worshippin' democ ranauts—the Middle Ages CIA deleted 50 million whiners and still couldn't snuff the human spirit, and now it's 200 years too late and *we're rapidly becoming the dominant religion!* That's a conservative estimate by the way—the fifty million. The only danger now is the Monotheists who perceive the world going to the devil (read *Pan*) and would rather put us all out of our misery. Such noble self-sacrifice, I don't think!

Basically 120's the baby's heartbeat in the womb

50 MILLION HIPPIES BURNED AT STAKE

M2: Your editorial in *epi*2, "50 Million Hippies Burned At Stake!" maintains that your optimism springs from the fact that Western Culture passed its Dark Night Of The Soul when we evolved past allowing dissidents from the sick consensus reality to be physically exterminated.

FC: Yeah. And ever since, we *pagani*— Latin for non-military personnel (by the way... the Romans were fascist meatheads who *destroyed* civilization)—have been coöperating and breeding unstoppably, together with our personal gods and succubi like

FC: He did. But he wasn't trying to be a Scientist then, he was trying to be a Human Being. The hippies got it right in their hearts—and in their Vision—they saw the Solution, but they didn't understand the Problem, hadn't studied real cosmicultural history. They still don't understand what *Be Here Now* means. They think it means today's a brand new day and yesterday's contracts are cancelled. I ask you: how're you gonna build a new world like that?! And they never *ever* understood about moneypower—so they're paralysed with guilt when offered a chance to get some, and impotent when they've none.

And they actually thought you could *drop out*! Amazing, imagining you can build your own separate, safe little virtual reality! Or like imagining you're just an observer!

Cosmiculturally, Hippy was the Goddess's First Wave and was never meant to succeed. It was mostly a necessary balancing reaction against Techno, a dry run to prepare a solid bed of Alternative experience for *this* Wave, the Rave Wave. To seed the culture and alchemize a whole new generation. Hippies shook their hips. Ravers have grown up relatively unrepressed in post-Hippy culture and dance with their whole bodies, hearts and minds.

The First Wave was also intended to produce the first planetary network of truly tested pagan elders—"cheerleaders" as Leary now puts it—rainbow warrior exemplars who've been steeled in humility, patience, disregard for material reward other than the moneypower that gets things done, and most of important of all *coöperation*.

LEFT TO RIGHT: FRASER CLARK

PLEASE GET OUT OF THE NEW ACCELERATING RHYTHM IF YOU'RE A BAND AND CAN'T LEND A HAND

M2: So can we talk about the music itself?

FC: No, no, no! [*Laughter*]

M2: Why 120 beats per minute, for example?

FC: All right. I'll try not to give my standard speech. For a start, House has branched out a lot since 120 bpm, especially with the advent of Ambient House. We don't even call it Acid House any more, and even "rave" is almost out. But basically 120's the baby's heartbeat in the womb—which describes the latent House Generation on the planet very nicely indeed! [*Laughter*]

Look. The 90's generation ain't the 60's generation, and it don't *sound* the same either. Rock'n'roll, as a *sound*, is what grandparents listen to. House is a faster vibe for a faster era—time's speeding up, coming to its climax. Imagine 20,000 young Westerners dervish-dancing to 120 bpm all night 'till the sun comes up. You get to feeling you're in the *same* womb! (Which we are—if you stop to think about it!) Everyone just *knew* that something important was being born. Amazing group solidarity—20,000 people *feeling* together! If that's not what the planet needs... wow!

M2: But isn't that what they said about Woodstock? Hasn't rock'n'roll played such a crucial role in Youth Culture that it can never...?

FC: It's hoary with tradition, huh? Gotta show the fat old billionaire some respect? Look, he sold out long ago, so let the dead—or Disney—bury the dead. Rock'n'roll got totally corrupted and formalized long ago. For years now, it's been just career-conscious rebels (with managers) shouting "FUCK THE SYSTEM, now gimme me money, get outa me face, I'm off to me country manor." As a social force, it's dead. I just wish to hell it'd stop screaming.

Why should it be so hard to accept that things that were useful at one stage can lose their relevance at another? Yin/Yang—isn't that always the way, man? There'll always be huge markets for Rock, like Sinatra, but it's part of history now, socially irrelevant. Even statistically, after 25 years there obviously can't be many new guitar riffs left to discover, and anyway what's the point? So move aside, Big Brother, make way for a new sound for a new species. I don't know, maybe phoney, blustery old egostars always have to be forced off the stage. Living Rock'n'Roll Museum, thank you and goodnight.

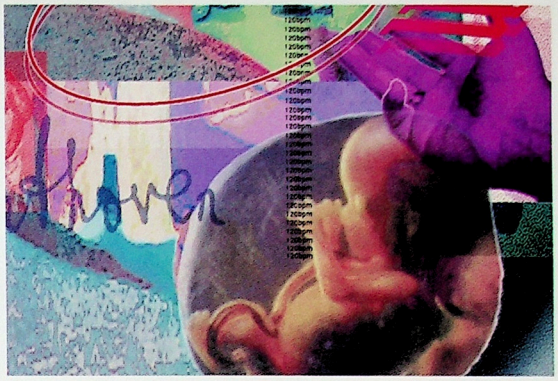
GROOVY COLOR BACKGROUNDS BY FRANCIS DORÉ

Dance isn't optional. It's the necessary booting-up process

M2: So how is Acid House different?
FC: It's the Paradigm Leap. Rock was about rebellion, opposing the sick system, about blowing the trumpet to bring down the walls. Right for the time, and maybe it even did its job (though I have my doubts) but we don't need that immature destructive attitude today. Now we need (and it's no longer just American and English, the whole planet's getting plugged in) music that unites, brings all the cults together again, samples from every culture on the planet. Which is what House does. Bands like the Happy Mondays and Stone Roses are even recycling Rock!

M2: A lot of Rockers are going to hate you for this.
FC: If they're flexible and alive enough, they'll adapt. And then probably go on to make the best House music! Because, you know, even though House replaced Rock as the mainstream this summer in Europe, it's still in its infancy, even after 4 years. And it'll go on evolving for the rest of the decade. Posses of truly psychedelic Beethovens and massmind networked acid jazz orchestras will appear, not just unbalanced Hendrixes and Morrisons.

See, Rock belongs to an age when we still needed leaders. You can tell a Rock crowd from a House crowd because the Rock crowd are all looking in the same direction—at the big fat egos strutting on stages while everyone passively consumes. The House crowd is crucially different in that they're looking at each other! Music's back in the hands of the People now, or back in their feet. I'm amazed you haven't asked me about "live" music yet.



MICHAEL SWAINE

WHAT'S LIVE ABOUT CONSUMING ENTERTAINMENT?

M2: My very next question! Isn't it all a bit impersonal and unhealthy?
FC: What's personal, healthy or even live about 10,000 people passively consuming rehearsed entertainment from 4 presumed "live" young ants on a stage half a mile away? With House you have 10,000 *live* participants and no stars to worship at all! *Much* healthier. And talking about health, that's probably the single most miraculous development from House. It's now hip to *not* drink alcohol! You can't booze if you're driving and dancing for hours, and anyway it doesn't mix well with "e"—with ecstasy. But personally, I honestly never expected to see the emergence of a non-alcoholic generation in my lifetime—and I'm an optimist. That alone is the single most hopeful development I've seen in years.

M2: I agree about that, actually. Most of those kids were drinking fruit juices or mild psychoactives. In a night club! But isn't the camaraderie and human contact of the rock group...
FC: I keep interrupting you on this rock'n'roll business, but imagine how many times we've had these arguments. One thing that proves the power of House is how much the Music Biz loathes it and has been trying to kill it off since it started. House spells the Black Hole for them, see? All those Super Ego Groups they've invested millions in? And now kids are making it in garages for themselves and then getting to No 1. Sometimes even without managers! I mean the fact has always been that nobody is so much better than the next guy that he needs a whole fucking stage to himself! And besides, in any band there's usually one really committed guy who's constantly being held back because Fred the fucking drummer forgot, or Dave the guitarist was really only in it for the chicks. Now drum machines and synths have replaced them and the real artist can get on with it. Fred can raise chickens like he always really wanted to.

M2: But how can you explain that nobody over the age of 25 knows anything about Acid House in the U.S.?
FC: Just watch it change! For three years now I've been telling Tim Leary, Phase 1 SuperSurfer par excellence, that Phase 2 of the gene-pool's Cultural Wave is already here, the one that's to throw us up on the New New Age shore—that's all of us together, by the way, or we all get thrown up on the cosmic compost heap, forget that separate particle stuff! House is no longer new, see: Phase 2 hasn't only swept across Britain, it's superbreeding at warp speed across Europe, Australia and Japan, and already licking the edges of adolescent America—that's if it hasn't started seriously denting your charts by the time this gets printed. And for three years Tim's been telling me "It's happening everywhere, Fraser."

I KNOW IT'S HARD TO GRASP FROM ACROSS THE GREAT WATER...

Time for us molecules to start dancing and us particles to start waving again!

M2: But surely the House movement *is* just Britain's version of the general acceleration occurring in pockets around the globe and, particularly from the more serious scientific point of view, in California.
FC: *Serious*, get you! Why are our best holistic mystics and visionaries always trying to sound like old-fashioned bloody "scientists?" Tim dropped all that when he came over to Europe last summer to make the record. [*Origins of Dance*]

for moving into the further reaches of the New Culture

Take a closer look at Virtual Reality and all the computerized multimedia technologies from a cultural-historical perspective and they begin to seem dangerously like Super-Alienation. People are now dreaming not only of retreating inside their own private worlds, they're actually building them! And then rationalizing it on the grounds that they can distantly—and in the most controlled manner—share the space with a few specialist companions! Virtual Alienation! The supreme human hell where even your feeling of alienation might be only *virtually* real! What else but a severe lack of cosmicultural nutrition could trigger such random cancerously disconnected paths in our culture!

Now I'm not saying it has to be that way. If we're becoming more complete, open, coöperative human beings, then obviously these technos can extend our communication miraculously. But, without that spirit informing everything we do, we're really only further reducing ourselves to mere particle-ness.

M2: But how can I tell them back in California that the long-awaited mass paradigm jump is emerging from a bunch of kids in London?

FC: Where would you expect a techno-pagan renaissance to start? From a test tube? Even the Science you talk about would tell you to look for the change triggers where the culture is most dense and turbulent. And Zippy would predict it won't come from where either pagan or techno is too dominant—which precludes the US and the Third World. Ask yourself this: do you *really* think the fate of your life, or our planet, depends on the next wee insight *somebody else* is going to come up with, or *even that you're* going to have? If you're over 25 you know *already*, all of us do. People don't even argue about the broad outlines of how things should be. The good 60's hippies knew it all 20 years ago and didn't need to wait for Science to come plodding along to prove it. The only *real* question is: *How do we convey what we already know to the maximum amount of people planet-wide in the minimum amount of time that's available?*

M2: But doesn't that imply an élite who have this knowledge? You said "No More Leaders."

FC: Leadership's outmoded, that's one of the things we're all agreed on. Even the individual is relatively unimportant—I hope it's not illegal to say that in America! You know, Communism was bad for humans, but so is Capitalism and a system based on Competition. Have you noticed that people from the Eastern Block, while much more prepared than us to condemn their whole sytem, still remark that people are friendlier over there. Think about that. Hippies said "A plague on both their houses" 25 years ago. Our over-emphasis on the individual is actually a bit grotesque. Posses are the correct survival technique today. And the future will arrive on your doorstep in the form of a posse of people already living the new lifestyle. More and more of these posses (and I don't mean tribes which are separate from the main cultural body) will appear in ever-increasing and networking numbers until it one day becomes obvious that they've taken over. The real battleground lies in forging a new lifestyle and culture which will, to put it crudely, swamp and replace what ruled before it. This isn't linear science, in case you hadn't noticed, this is simple common supersense.

Rock'n'roll, as a sound, is what grandparents listen to

THE HOUSE OF GOD: THE CHILDRENS' CRUSADE FOR THE FINAL DECADE!

M2: All right. Suppose everything you're saying is correct. What about people who just don't *like* House music?

FC: House is like any religious experience—a matter of conversion. I can't think of anyone who loved it the first or even the second time they heard it. I couldn't *stand* it at first. All those buzzy, whiney bleeps irritated my ears, and it all sounded the same—a lot of nothing going nowhere very very fast. Then one evening I was converted, and now I never play anything else.

M2: So? Describe your Damascus! [*Laughter*]

FC: It was the second last "Sunrise" before the Authorities stamped out the massive open-air raves. I remember Tony Colston-Hayter, the Acid House King in those early days, announcing "the police have served us with 12 injunctions but we got one on! We have the power!"

YOU CAN'T HAVE A VIRTUALLY PERFECT CLUB IN AN IMPERFECT SOCIETY

FC: I eventually coined the phrase: "You can't have a perfect club in an imperfect society. You have to change society." *If* Thatcher's Britain had really been as advertised—they weren't all yuppies by the way, there were loads of ex-football hooligans too, but football hoolies on "e" is a whole other story—*If* it had really been free and entrepreneurial, instead of monotheistic, capitalistic and puritanical—it would have welcomed this brash new form of pagan enterprise and Britain would now be benefiting from its export to the rest of the globe.

We virtual individualities are merely observer brains on legs that Goddess has evolved in order to see Her go-forth-and-multiply Self from more and more angles as she complexifies and prepares for Lift Off. It's taken Gaia two million years to grow us so let's not blow the whole Experiment-That-Is-Us back to Square One. But all we are is freelance radicals which She has complexified so She can monitor what the hell's going on and going wrong. When we dance, especially in Nature, we're being debriefed by the Goddess. All our observations are digested into the One Mind, sifted and sorted and matched with other Intelligence Agents' reports, and then Goddess feeds her tentative conclusions and working briefs back into our heads via our bodies. Dance isn't optional. It's the necessary booting-up process for moving into the further reaches of the New Culture. M2

Exploded Hearts

GROOVY COLOR BACKGROUND BY FRANCIS DORÉ

"From the Sphinx to the treasure-vault runs the tightening thread that pierces the children of want to the heart. Mechanical impulse and primitive urge dance as one and forget, in their frenzy, the light of creation."

—Garcia Lorca, "The Dance of Death"

Jas. Morgan

A certain jaundice has set in. The Rave Scene, once so bright, has yellowed around the edges. But there was a brief scintillating moment.

It began in London as a reaction to Thatcher Rule. Anarchic revelry and relentless sound. It became so huge the authorities wigged out and began to clamp down. And in so doing, sent us some of their more interesting exiles.

The first Bay raves—like the large one at Townsend in '89—were perceived as one-off events with promoters and DJs imported from London for the occasion. But by early '90, clubs like Recess and Osmosis were featuring a distinct house vibe. Since then, Destiny, Glass Haus, Five Foot Tongue, Toon Town, Mr. Floppy's Flophouse and A Rave called Sharon have joined the fray.

Now there's a veritable cultural badminton with VJs, sound wizards and promoters vollying back and forth. But with the higher ante, Mammon raises his ugly head. And all the other powers and principalities that corrupt.

Kids are ingesting ever higher doses to achieve "Fusion." Tolerance, megadoses, and a little speed for a kicker and you've got Cardiac City. (The B.M.A. has reported 5 E-related deaths).

There's a point where infectiousness shades into compulsion. Are they dancing—or is that some kind of new movement disorder?

And the sound: the throttling heart beat of the unborn fetus amped to 50 kilowatts. Cascading neuropeptides combine with the whole panoply to create a crisis metabolic state. Hearts explode like Lorca's bursting cicadas. Trance-dance and faux communion pulse through the night. And in the remorseless dawn, the terminally saturated lay wasted.

Is this just a fin-de-siècle replay of the Dancing Manias? Or maybe some higher-phylum grexing?

But whether Raves are about bonding or catharsis, they're a permanent if moveable feast. And move they must—one step ahead of the helicopters.

The summer will see House go more mainstream in big outdoor gatherings. Already the Grateful Dead have asked Deee-Lite to open a show. But for those who don't want to recreate a "Day on the Green" there's a move toward more intimate indoor venues. And while promoters and money-junkies jump on to House, the purists strive vainly to maintain the "feel." The original feel was the human heart vibrating at 120 b.p.m. in synch with the beating of angel wings. The winged heart was the original logo for Ecstasy, derived from ancient Sufi sources.

So just who, I'd like to know, dropped the angel wings?

M2

Photoshop by Jill Greenberg, illustration by Miles Ludvigsen

LADY MISS KIER: *Infinity Within* is from the *I Ching*—it's about balance. *Infinity Within* is the flip-flop of the concept of *World Clique*, which was often misunderstood. We would get a fan letter that would say "I'm a member of the world clique because I buy these clothes and this music." Actually the World Clique was to include the fat-bellied members of the planet, and the rocks, trees and grass. We're looking for unity, and respect for all cultures. To balance it out, we came up with *Infinity Within* because people need to look within themselves to aspire to better days on our planet.

K: We went to the Human Rights Awards to meet Jimmy Carter. I asked him if they would release the UFO files. He told me he saw a UFO in '68. I asked him if he'd record it in the files. He laughed, and got out of the conversation quickly.

K: I go dancing a lot... in disguise these days. I've always loved attention, but sometimes I don my "Fern of the East Village" disguise. She's this kind of frumpy girl.

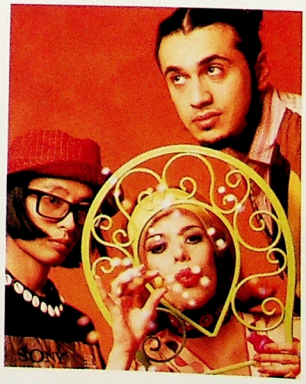
JILL GREENBERG

DMITRI: The song "IFO" on *Infinity Within* actually uses the sound of a "real UFO," and also there's a recording made inside the Mystery Circles.

D: As much as we love computers, they're not environmentally safe. There should be an effort to make them safe.

JILL GREENBERG

JUNGLE DJ TOWA TOWA: Japan has changed tremendously in the last four years. The Future Party was created to bring up consciousness with music. It's more integrated now. I like the raves there now.



CHRIS CARROLL

MONDO VANILLI

The automatic carriage-return on the typewriter, electronic central locking of cars: these are the things that count. The rest is just theory and literature.

—Jean Baudrillard

MONDO Vanilli screamed, in the last seconds of its life as an unincorporated, single-edged being, before being drawn and quartered by the four horsemen of the epoch-eclipse. "...I will survive," it wailed, "as four, the better to carry out my plan of media infiltration!" The horsemen just laughed, yelled "Gigayup" ...and Media Blackhole was born. ◆ And so MONDO Vanilli is a double dichotomy. There's the 'Can Do' Scrappi DüChamp, the being behind the curtain, who lives for Production—more and ever-more-chaotic stuff. Directly opposing his Vanilli modus is the Evil Philosopher/Guru Dr. Eliot Handelman, who feels Concepts must never be degraded by being fleshed out. Fronting the stage is Simone Third Arm, whose out-fleshings are palpably undeniable. And slightly off-center stage, ("left, right, what's the difference?"), more visionary than visible, is R.U. Sirius. The mad conductor, Mondovani himself, R.U. wields the iron baton with a manic grin—does he control this chaos? ◆ Dr. Handelman recently gave darshan to R.U. Sirius and Scrappi DüChamp. Anecdotes and Hennessey flowed, the roof of Greenhaus Studios actually respirated, and the moment was captured on VHS.

G. Gordon MIDI
with photographs by
Jay Blakesberg

ON BEING MONDO VANILLI AND NOTHINGNESS

DR. ELIOT HANDELMAN: What are we talking about?

MONDO VANILLI: MV as authentic inauthenticity, Hawaiian sunrise, music, art, politics, living fun, toys, petroleum products—all that and more. Whatever we can buy, sell, steal. Whatever we can suck out of the media maelstrom into our corporate logos becomes MV. Whatever we then excrete is MV. Whatever battles we get into with the media are subverted to become MV performances...

EH: So this is a strategy of longevity. This is Freud's concept of death: going beyond the pleasure principle. The idea is that all animate matter wants to return to inanimate matter, to die. He wanted to know what the causes of death were, and at the time the most advanced theories were that death resulted from a failure to excrete the products of metabolism. So we're now turning this into a theory: how to live by excreting the metabolic products of the entertainment industry.

MV: Then unmitigated, unmetabolized media would be death. Well, what would you have MV be?

EH: I think MV should be concerned with doing as much damage to the entertainment industry as it can.

MV: We've talked about re-releasing *Led Zeppelin II* with a different title and calling it an MV album. I like the idea of random acts just to fuck people's minds, and maybe fuck up the entertainment industry in the process. So if we don't have enough money, we just release it. If we *do* have enough money, we actually *pay* Led Zeppelin to let us do it. But there's no revolutionary intent here—other than, "Nothing is true. Everything is permitted."

BUY THE WORLD A COKE COMMERCIAL

EH: Here's a related idea. The game is—we advertise Coke or Diet Pepsi. The commercials are *not* ironic. We just pre-empt the advertising; we try to get people to buy Coke. And feature the advertisement *itself* as the product of an artistic media/entertainment collaboration.

This is done without anybody's approval: the band doesn't benefit from the selling of this product *in the least*. The question is, can we elicit the response, "Okay, these guys have got the idea. Art is dead. The only thing left is fucking ads. *These guys are doing it.*" You can't write about love or death anymore, right? You write about Pepsi. And this is all that's happening. How far can you go in that direction? I think it's central to link MV to commercial concerns immediately. I don't like the idea of a rock band that's just a bunch of kids with the idea that they can really do things. There's nothing to be done. There's nothing to do it with. *There's no one to do it for.*

COMBINATORIAL COPYWRONGS

It used to be the case that to copyright music you had to have a lead sheet, you had to have the thing written out. Then the copyright law extended to tapes and records and electronic storage devices. And now the question is, "What constitutes plagiarism?" There used to be guidelines: if six consecutive notes of your album matched six notes of anybody else's album you were liable.

So, to check for plagiarism you go, "Are these notes 1 to 6 equal to any consecutive six notes in any piece that was ever written?" Then you would check notes 2 to 7, and so on. Now, in principle I'm for this, because sooner or later you're going to run out of notes. It's a very large number, but it's finite. Eventually you're going to run out.

DE GUSTIBUS NON EST PUDENDUM

You can play some fun games once you understand what copyright law is. These are interesting laws because there's no way they can be enforced. They're artistic Nuremberg laws. Which had to do with proscribing sexual activities between Aryans and non-Aryans. Copyright law proscribes intercourse between the authentic and the inauthentic.

Then the question is: once you understand the law, how do you get around it? And the answer is: *you change the sixth note!* So the détournement of a copyrighted album like *Led Zeppelin II* could be effected by replacing every sixth note with a sound blip.

OVER THE MEDIA EVENT HORIZON

This brings us to the R.U. Sirius Presidential campaign. [*MV had sponsored an R.U. Sirius for President event using the slogan "R.U. Sirius—the only possible response to the other candidates."*] Why should R.U. Sirius even present the physical profile of R.U. Sirius? Wouldn't it be far more interesting if R.U. appeared to *be* George Bush? Actually said in George Bush's voice all the things George Bush says? And even seemed to be president at the moment?—Except his name was different.

The moment you stick your own personality in there, your actual identity, you're sunk. I can see MV as a band as a theory of media *and* a theory of personality, of selfhood, in an age that barely supports the most rudimentary concept of personhood. But really, I'm thinking of a powerful attack on everything.

MV: I'm thinking in terms of something that can suck everything in.

EH: Yeah, become the Black Hole of media. I want to take over the whole fucking country, the world.

FILLING THE MUCH-NEEDED VOID

EH: Is the music supposed to sound good?

MV: The point of the program isn't necessarily to make a strong impression through music, although the music should sound like something they might want to take home. It should sound *proficient*—not necessarily good. People listen to MV and say, "It sounds *like* something." And that means it fills a niche.

EH: That's just the way people construct reality. When you meet somebody at a party, you say, "He's like... she's like..."

MV: Right. MV music is referential... contextual. Everything that we're doing right now is in the key of B. To me, if we were doing really avant-garde music it would make it less interesting. So we're making pop music. It's a contextual choice as well as a mercenary one.

EINE KLEINE NICHTMUSIK

EH: The problem with this is that it's all real work. This actually promotes an authentic sort of music. There's already a history of this sort of stuff, beginning with sampling.

I'd like to make music along the following lines: It's like trying to find out who owns a building in New York City. The tenants are complaining because the place is falling apart. But the janitor is hired by some agency, which is contracted by some other agency... and the owner is 25 steps removed. Some slumlord that just collects the benefits. That's how music should be made. I'm not interested in the concepts of creativity and production. I'm interested in *anti*-production, *non*-production. That's one of my key concepts. I think it's important to get away from this idea of producing things, realizing ideas.

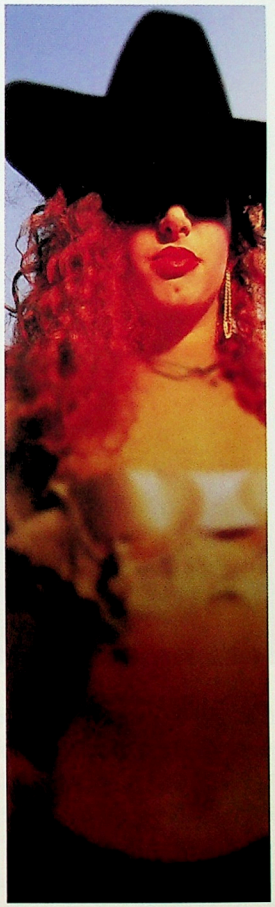
MV: Anti-production is where we actually diverge. Not that I oppose the *concept*...

EH: It's a good concept. You can't knock it. I'm promising nobody will ever have to do anything again except eat and buy food and that sort of thing.

LOVE IS THE QUESTION?

But I must admit that so far the MV concept is a bit negative. In not doing things that we love—which probably is the secret to any kind of success—but doing things spitefully, out of hatred and betrayal and that sort of thing... so I think we need to introduce Love. Let's get Love into it. Because that's where the women are.

I think that MV standing for Love might be very workable, because all this Rave stuff is so Loveless. And the kids are all so brainless and stupid and inarticulate that it's really regrettable as a seed that's going to perpetuate itself. I think the solution clearly has to do with Love.



POP LUV

MV: What is Love?

EH: Well, what was the biggest media event ever in California? It was the Summer of Love...

MV: The Rave kids think this is going to be the Summer of Love, because of the 25-year cycle. Everything moves in 25-year cycles. So it's pop love: LUV.

EH: Well, *was* that Love? I wasn't there. I was 13. We didn't have Love in Canada; we had détente. I think that Love is the missing element in the pop world today. A powerful media-directed imperative to love. I want Love. This is what Love means to me: it means that people talk to each other in the street.

MV: I don't want people talking to me in the street. It's invasive. And I'm always late for everything. *I don't want to miss appointments totally because I'm talking to somebody in the street...*

SEND IN THE GROOVY PREGNANT CHICKS

EH: I love pregnancy. I think that in the time I've lived in California I haven't seen any groovy pregnant chicks. It's because there's no Love. Promoting pregnancy along with Love might be the way to go. The fetishization of the pregnant body is definitely a direction I'd like to take this in. Can you get Simone to wear a thing that makes her look pregnant?

MV: Yeah. She'll make fun of it though.

EH: She's so cynical. She doesn't have enough love.

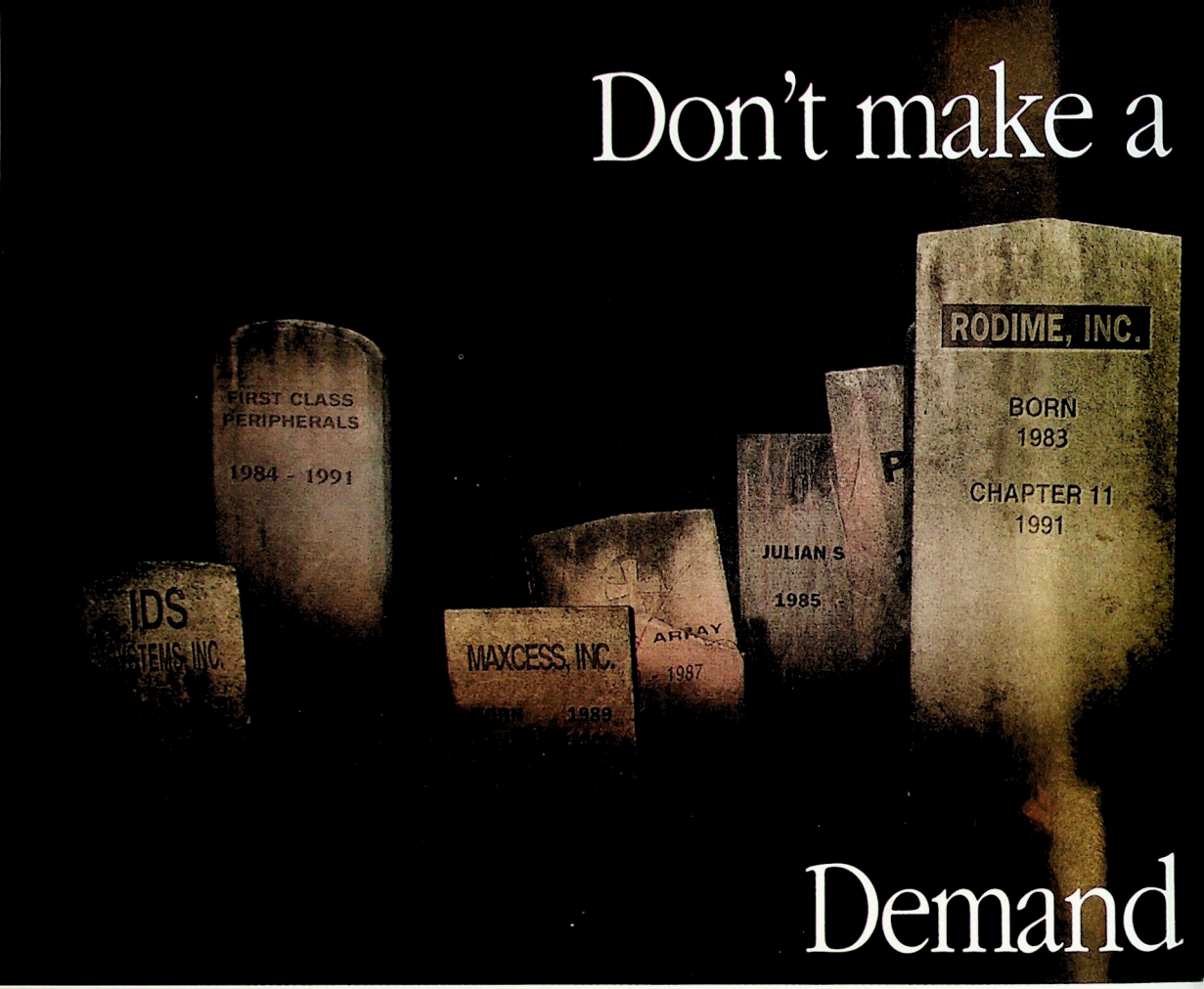
MV: That's not true. She's one of the most compassionate people I know. She's got tons of love. She just likes to make fun.

MAKE LOVE, NOT FUN

EH: Make fun of everything except love. Love is the concept, pregnancy is the accoutrement, and scrotal condoms the instrument of the new revolution. Rubbers and prophylactics are in. Transparent latex body suits are in. Advocating safe sex and *lots of it*—in. It's extremely important right at this juncture to be talking in the direction of how to make it possible for people to fuck freely, without even knowing each other's names.

MV: We're love's promoters. We are the Bill Grahams of LUV.

Don't make a



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Brenda Laurel the Lizard Queen

by Jas. Morgan

Photographs by Bart Nagel

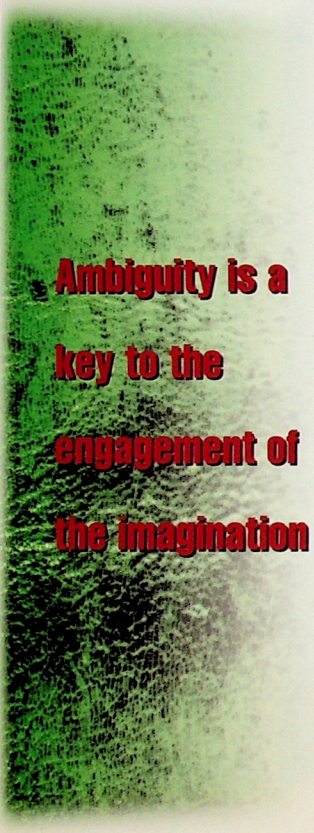
Now, it's true—people do use the word "weird" when referring to Brenda Laurel. In some cases it's because they don't know her very well, and in others because they know her intimately. But Brenda's seriously weird. Weird as in the Weird Sisters—the Norns. Weird as in prophetic and other-worldly. But Brenda can also be very this-worldly. She's a ready and eloquent public speaker, edited The Art of Human-Computer Interface Design (Addison-Wesley, 1989) and wrote Computers as Theatre (Addison-Wesley, 1991). She's a formally trained actress, video game designer, and outrageous personality—and maybe most remarkable, considering all this, she's a wife and mother. She changed my life. That's probably the least she aims for—she's got a Ph.D. in Interactive Fantasy. Nevertheless she can be gut-level real. Her rants may seem fantastic, but they are dreams that are coming true. You'd better listen to Brenda Laurel.

—Sally Rosenthal

MONDO 2000: I've seen you roll your eyes at Jaron's notion of becoming a "virtual lobster." Do you find that guys have limited ideas of what VR can be? And given no technical difficulties, what would *you* like to be?

BRENDA LAUREL: Me? Well, probably a lizard. Last time I hiked in the desert I noticed that I sprouted a long turquoise tail.

It's not "lobsterness" that bothers me about Jaron's rant. I *celebrate* "lobsterness!" The premise that you can mess with your self-representation is really central to VR. The thing that Jaron never wants to talk about is how the lobster *got* there. We as artists can't anticipate everything you might want to be, and I don't think you want to make people write computer programs to enter VR. So we have to build systems with "virtual stuff" in them that people can shape from inside the experience.



M2: But the male/female modalities in VR, boys & girls...

BL: I've said it before and I'll say it again, I think that in general boys have had this fantasy about leaving their bodies. But I think that's a cultural artifact of the priesthood who gave us computers. And that generation is just passing away.

At Hackers in, I think, 1989, there was a woman's group. There were 13 women out of 300 attendees, so we all went. Some men too, mostly out of a sense of social responsibility. The girls were complaining about how much discrimination they'd suffered, and they couldn't get on the mainframe, and people turned off their password—the usual rants. And this one man, whom I won't name, who's a brilliant programmer and a good friend said, "Well maybe the reason that we were in computers was to get away from you." That had a huge impact. Somebody finally had said it.

DROPPING THE DEAD MEAT

Even if it didn't have to do with getting away from women, it certainly was, in the early days, a profession that was chosen by people who weren't particularly interested in social intercourse. And so, as a result, the body didn't seem to be very important. I mean, the hacker stereotype doesn't come out of thin air, right? Over- or underweight, ill-groomed, unhealthy folks who consume nasty substances and live their lives in the computer. It's no wonder their fantasy is to leave their body. [*Laughter*] They already have!

When a new generation of people comes in, young women and men, old women like me, there's a completely different paradigm. Which has to do with an implicit rejection of mind/body duality.

Now, there are people like Brian Hughes and Sandy Stone—not even young people, particularly—and the kids that I meet on college tours, who are *fusion people*. They have combined majors in ethnographic studies and computer science. It's a real new era. And although the dualism is largely historical, we have to remember the weight that our patriarchy carries: our old priesthood is now ensconced in big computer corporations. Although it's history, demographically, it still counts institutionally and we have to be aware of it—we have to be able to call it out.

NEXT: REPTILE SEX

M2: So you deny there's a masculine and feminine modality to the composition of virtual worlds?

BL: The male-female differences I see in authoring are mostly cultural artifacts, and I think they're passing away. The place where it's most obvious is in the issues around sexual applications of VR, because women are just finding a way to have a voice around their own sexuality. To own it and find it OK to make representations about it. Because you can't do sex in VR until you have tactile feedback [*laughter*]... but you *can* do erotica and porn. The people who are expressing that desire now and formulating its content are men because they're more comfortable with that. But I think that's changing fast. This may be a medium where women have a chance to explore this stuff more.

And that leads me back to my lizard. I mean, I've done trans-sexual. Now I want to do trans-specieal, you know?

CYBORGS ALREADY: THE FUSION FOLKS

M2: For people who are not familiar with Stone or Hughes, describe this "fusion person" that is currently emerging.

BL: Well, I think it has to do with the power of VR as a cultural paradigm. Computing didn't attract these renaissance folks the way interactivity as a medium is now attracting them. There are a lot of people who know how to work with media and who have interests in media and concerns about media, right? And that's a more pan-gender, pan-cultural thing. That's part of it, but that's not all of it.

Sandy Stone's been a cyborg since Day 1. She is in a relationship with technology in a way that's extremely interesting, and is at the same time off the scale in terms of humanistic energy. She's a very current, very fast-thinking, fast-moving philosopher. She's been thinking for a long time about the ways tech relates to culture, bodies, sexuality, art. She's known all along what the rest of us are just finding out. Tech wasn't interesting to artists and culture hackers when von Neumann was doing it. It's interesting now, because folks like Sandy have given us some context, and because tools have been developed to the point where non-technoids can actually start to do something.

THERE'S A PARTY IN MY MACHINE

M2: In your latest book, *Computers as Theatre*, you make the point that you don't consider these things tools, but that you consider them a medium.

BL: Well a medium can comprise tools. A medium can also comprise agents and companions and friends and worlds, right? I mean that's Alan Kay's notion of the medium, and I subscribe to it.

Ivan Ilyich uses this word "conviviality," to mean that a medium is accessible to everyone as an author. Writing texts became convivial a few generations after Gütenberg. Authoring moving images is becoming convivial with video cameras, although technology for editing still isn't affordable or usable enough. Authoring in interactive media is starting to become convivial because people have bothered to develop higher-level tools, and people like Bill Atkinson say to Apple, "You gotta ship HyperCard with the machine."

NOW THE COMPUTERS KNOW THEY'RE MEDIA

Where it has to go is the way of the printed word. The way it gets accessible to everybody is where there's no difference between the authoring language and the presentation language. You don't write a book in a different language than it's printed in. When you make photographs, you work in the language of images. There are technical skills to master, but the tech gets more convivial as the medium takes off. Computers just figured out in the last decade that they're a medium. The new kind of folks who are using them know that's what they are.

M2: This brings to mind Burroughs' idea that when you hold up a picture of a rose you immediately know what it is, but when you hold up a card with the letters "r-o-s-e" written on it, in your head you read "r-o-s-e" first before cognition. So there's another level of translation involved. Do you find a similar dichotomy between hieroglyphic and phonetic language as there is between presentation language and authoring language?

BL: Ideally what will happen to our personal languages—*mano-a-mano*—will be that we will come to have a better way of integrating visual imagery into the way we communicate with each other. It's interesting. In film it was true and in computers it was true: one of the first things that happens when you introduce visual imagery is that there's an immediate thrashing about for a syntax. And I think that's well on the way. In a perfect world, the tools for being flexible enough with visual imagery in the way that we construct communications for each other will become available enough that the syntax can "grow legs." Evolve, the way it always does in a culture.

WHAT DO YOU SAY, DEAR, AFTER YOU LEAVE SYMBOLIC?

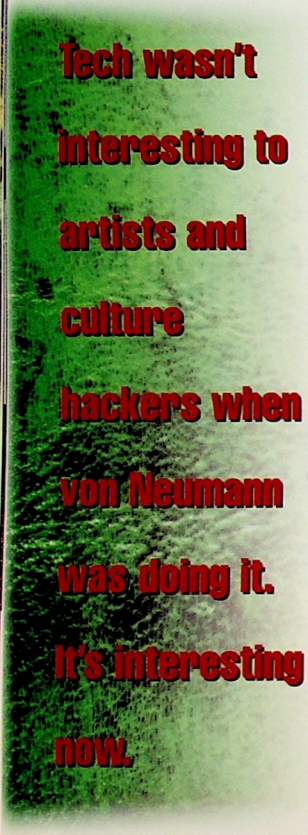
My husband says, which is instructive, that people talk about this as "post-literacy." That's another bone I have to pick with Jaron—he talks about "post-symbolic communication." There's no such thing! Unless you want to become an invertebrate! Everything is symbolic, everything has syntax, as my friend Terence McKenna says, [*affects Terence's nasal lope*] "What if the world is *text*?" So it's not a question of post-symbolic, it's a question of post-Iron Maiden, post-technology-specific.

We have the opportunity to learn the syntax of multimedia information, and the more we reduce the granularity of information through multimedia, the more that becomes an Esperanto of the imagination.

WALL STREET FINDS ITS OWN USE FOR THINGS

M2: What signals will we see as language evolves toward this construct you're talking about?

BL: It may be that this country declines into some combination of economic recession and political repression such that people don't get to develop in this way. But assuming that they do, the sign that it can happen is, in the near future, that a regular person can capture and store personal imagery in a random-access format. The big bottleneck in multimedia right now is that I can't capture my world in moving images or still images and add that to the database of a multimedia product. OK?



And in virtual worlds it's just the same. If I can't put *my* images in there, then interactivity is constrained to the world of changing form and structure. And you never get to introduce *content*. But content is what it's about. So one way we'll know that it's going the right way is if somebody announces next year that there's an incredibly cheap form of read-write optical media.

And if that happens, which it will—in a world that's not overly regulated and constrained in bizarre ways—the street *will* find its use for things. And we will have a different dialogue as a culture. We won't have a few information providers which we must all interpret, and an information world in which we're only represented as numbers in a poll. We'll have a world in which we're having discourse!

POLYGONS DON'T MAKE IT

M2: Let's talk a bit about your current projects.

BL: Well, Rachel Strickland, [the videographer] and I got a grant from the Banff Centre for the Arts in Alberta, Canada, so we're going to build a virtual world next summer. Expect it to be pretty non-standard. It'll give me a chance to challenge just about everything that I find wrong at the moment with VR. It's time for somebody to change the water.

And so we got this thing approved called *Virtual Coyote*. We're going to be working with a lot of texture-mapped natural imagery for purposes of ambiguity, actually—because we think that ambiguity is a key to the engagement of the imagination. You can see faces in rocks and clouds but Polygons just don't make it. That's one thing that we're testing. And another thing that we're testing that we didn't know that we were testing, is the whole problem of the trendiness of multiculturalism. Because, we've based the design of this world on a lot of Native American stories. We were trying to disrupt the average American's notion of time and space by presenting them with a context that was "other than." The one that we were exploring had to do with mostly coastal California Indians.

THAT INDIAN IN THE WINDOW

Then suddenly I realized that it looked a whole lot like appropriation, that we could be misinterpreted as presuming to represent those cultures. So, there's this new challenge in the project, which is to make it clear that the purpose of our representation is to learn. And partake. But not to warrant that we have now understood, or to submit what we're doing as an *example* of multiculturalism. I mean putting an Indian in the window does not constitute multiculturalism! And I know that the hard way, by putting an Indian in a window in the Guides project. It was a valiant effort, but it looks pretty silly—this great Native guy in his wonderful wild clothing looking out at you from a neat little Macintosh window.

Multiculturalism, trust me, is the big buzzword of the multimedia industry at this moment. IBM has invested about $5 million in a project that brandishes multiculturalism. And their new slogan is "Multimedia is Multicultural."

WHEN I HEAR THE WORD "MULTICULTURAL"...

Well, this makes you nervous! "We'll go deal with the problem of cultural diversity by putting it on PCs." [*!!!*] You know? Well, I don't want to be party to *that*. But at the same time, the reason that they're finding it important to co-opt that energy is because it's *real* energy and it's because we as mainstream Americans find ourselves suddenly in the absence of an oral culture, in the absence of a culture at *all*, that we had anything to do with. And how do you recognize what your culture really is? And how do you recognize your power to create culture but by looking at other cultures?

M2: Do you have a strategy for implementing this?

BL: [*Laughter*] No, I have a *philosophy!* The next year is about figuring out what the fuck the strat... Well I do have a strategy in the sense that I'm working on a "multicultural" project with Simon & Schuster in the multimedia world. And the strategy is to make the authors of the content also the authors of the structure and the interface, to the extent that we can. So that we're not appropriating content and putting it into White Western form and structure. But that we're working like mad to create tools that are free of our cultural biases. And that may be utterly impossible, but it's worth trying.

M2: So, now we know the strategy, what about your *philosophy*?

BL: The philosophy that we should recognize and respect and honor other cultures is an incredibly important one in the world today.

ANOTHER RANT ON RAVES

M2: Why don't you like the Rave Scene?

BL: It's that they put this emphasis on *global* culture. And we don't know what that is, except that we think that we're constructing it. And

there's an utter numbness to personal culture, family culture, local culture—any kind of context for us as human beings. "The Brave New Teenager," you know? And the Brave New Teenager is at risk if they sever the cord of spiritual continuity from their individual and family and national and ethnic cultures.

We can advocate and move towards global culture, but global culture has to be IDIC [*"Infinite Diversity in Infinite Combinations"—the Vulcan slogan invented by Surak and touted by Spock*]. It has to be the Vulcan standard. We cannot throw out the baby with the bath water. It's too late in the game to have to reconstruct our spirituality and our ways of communicating and revering our elders. And it's dangerously wrong to say, "I don't care what the Inuit believed, because I'm a Global Villager."

TODD RUNDGREN IS GLOBAL AS HELL

I was talking to Todd Rundgren last week and he said "I'm a global citizen, and I don't have a country and I don't have a culture." And in a major way I'm behind that. Certainly my country has failed me in a lot of ways. Irrevocably failed me. But I do have an individual culture and I have a family culture and I have an ethnic culture.

And I have gifts to give. And if we decide that any gift which has a colored or cultural nametag attached to it is not an acceptable gift, then we are in deep shit! So when I stand in a neo-Dionysian rite, with sampled sound which has no connection to rap or funk or ju-ju or jazz, I gotta say to myself "We have thrown out the baby." And it's no surprise to me that there is a complete absence of eroticism in these gatherings.

M2: Oh, yes! You've finally helped me piece some of this together! That's the big thing that they play up: nobody has to hit on each other, but nobody wants to *meet* each other either.

BL: Yeah!

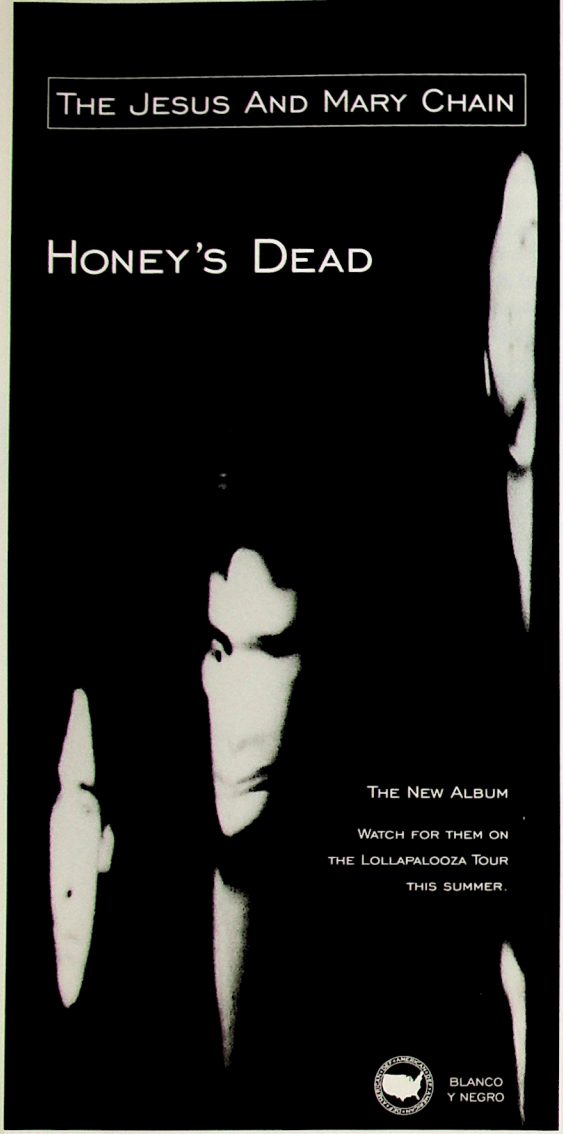
SAMPLED WORLD

M2: It's regressed below the Village People—there's not even an Indian and a construction worker anymore. And when you're so completely devoid of culture, sampled sound, like Gary Numan in the early 80's with his hit, "Here in my car, Here in my car..."

BL: It's not just sampled sound, it's sampled *information*. It's sampled experience. Neil Postman, of course, is the master at articulating this, but the evening newscast fragments what we might learn about the world into a sample. It's utterly meaningless. It doesn't have enough depth or length to support any kind of content that might hook one up.

And so my advice is, "Let's not throw out the baby." Let's get radical. Radical isn't saying, "I have no paths, I have no future, I have no identity, I have no country." It's saying "I have all these things, I have my wisdom, I have my personal power, and I am placing these in the *service* of a global community. That's completely different!

M2: Another aspect that nags me about the Raves is that you walk into a room filled with any species of this week's technology that they can



possibly manage to fit—all of it blinking at you at once.

BL: There's a tremendous amount of élitism in the producers of these scenes. Because they believe the "Gee Whiz" factor is enough. In fact, to be fair, it may not be elitism—it may be some sort of magical realism, you know? Just: "If I show the outward and visible sign of this new technology it will alter everybody's consciousness."

Now if somebody wanted to carefully and lovingly craft a communal virtual reality they could do it. And in fact, I want to, I'm working on it. But to say "I'm gonna blast you one from somebody else's VR experience," or "I'm gonna give you sampled CG," is just Gee Whiz bullshit! It's right up there with crack for stupid.

THE TECHNO-WEENIE SPEAKS

M2: Well, tonight they're rioting in the streets of California. Does it make you, also, think of the need for a kind of telepolitics, a kind of teledemocracy?

BL: In my role as techno-weenie, right? I think it could accomplish a global revolution. The electronic agora, the electronic town hall, the electronic meeting with Ross Perot…

M2: Well, we're talking about a discourse…

BL: The numbers are wrong for there to be deep discourse with everyone. But if we believe that we talk to each other well, and that Joe Beets from Iowa and Juanita Jones from California can do an OK job of representing us, then it could work.

Basically, one-way broadcast culture is fading out. The suits who talk about "interactive TV" think the big bucks will be in stuff like teleshopping and 900 numbers. I don't think they get what's happening to the culture. "Interactive TV" is about two-way, multimedia conversation. It replaces one-to-many with few-to-few, or one-to-one.

ELECTRONIC TOWN TALKSHOW

I'm so impressed by John Hawkenberry's new NPR national call-in show. There's an 800 number and people call in from all over the country. NPR and PBS give huge amounts of time to the stories that they deliver, compared to the commercial broadcast networks. And Hawkenberry's *Talk of the Nation* has topics from abortion to funding of public television to what women dream about. What he does as a talk show host is he engages each caller in a long dialogue. It's the best! Even though the numbers are wrong—in terms of ten million who want to talk and one bandwidth, one broadcast channel—representative democracy works that way. I think it might be, actually, way cool. Even though I have huge issues around Ross Perot's personal funding of his campaign, and even though he is kind of an asshole —his comments about gays and "adulterers" are either political pandering, stupidity, or insanity—I just might vote for him for two reasons. One, because he has proposed this Electronic Town Meeting thing, which is such a good idea. And two, because I want to blow up the two party system. This election is a cruel joke. I mean, now Bush has an urban policy, and Clinton is out there interviewing moderate white boys for VP. Some of my best friends are white boys, but this oligarchy has got to come down. I don't believe in not voting, even when the election is absolutely Pythonesque, so maybe a vote for somebody like Perot will shake things up.

M2: It bothers me that he doesn't tell us how he's going to implement this Electronic Town Hall Meeting without invading our privacy. He would have to have a PPIT—positive personal identity technology—in place. Which is where it starts to get scary…

BL: Yeah, it's something we need to think through. In reality, the first

instance of something like this would be more like a text version of a radio call-in show than a truly interactive forum, and the hairy part would be coming up with a smooth protocol for selecting among much more "incoming" traffic than could actually be displayed. But like a radio caller, it seems to me that you could identify yourself to whatever extent you were comfortable with. For polling purposes, people could voluntarily provide a sufficient amount of information—certainly less detailed than what you'd give the census folks. To me, the bigger issues are how to reform our contorted notion of representative democracy so that referenda like this would actually count for something, and how to provide access to people who don't have computers or cable television. Public kiosks might work. In any case, you're right, doing this well would require big changes in both technical and political infrastructures and a serious dollar commitment. But if the result was enfranchisement, then it would be worth it.

DON'T CONFUSE US WITH DETAILS: WILDER PALMS

M2: Now you have some involvement with a TV show due to air in Spring.

BL: VR plays a role in the show. Yeah, it's funny; just my luck—breaking into TV when it's about to croak. It's a television series that began as a comic strip in *Details* magazine by a guy named Bruce Wagner. He wrote an amazing novel called *Force Majeure* and has done several screenplays. The story involves a conspiracy to use VR to—well, to continue to bludgeon us with the current TV paradigm. It's a nightmare of one-way VR. I met Bruce, and he made me a character in his *Wild Palms* strip. I guess he liked me. So I started showing up in the strip, under my own name, and then he wrote a treatment of it that's loosely based on the strip and got Oliver Stone to agree to produce it. And they sold it to ABC as a six-hour mini-series.

Then Bruce hired me as a consultant for the script of the series, because it had to do with VR of the future and he wanted to know what that might be like. And as we worked on it he said "You ought to audition for it." So I have this strange involvement with it as a script consultant and bit-part actor in the series.

The reason that I chose to work on a series that portrays VR in a very negative light is because I think it's *important* that we consider VR in a very negative light! And also that we understand, as Stone keeps trying to tell us, that there *are* conspiracies in the world. Casual or formal, conscious or unconscious, they exist. So that's what I'm doing. I'm going on this weird odyssey with these Hollywood guys. It's scheduled to air on ABC starting in February. Now, I've gotta go take my thorazine. M2

Photographs by Bart Nagel assisted by Heide Foley, Styling by Travis Jaggers, Hair Styling by Francis Sorenson, Make-up by Jake, Vintage clothing by Jennifer Parker, Jewelry courtesy of Brooke Battle, Set construction by Lloyd Whittaker, additional location assistance by Jacqueline Neuwirth, Location: Zymyth Studio, SF.

DAVID EM

DIGITAL PORTFOLIO

UTAH SPIRITS 1992 © DAVID EM (REPRESENTED BY ROBERTA SPIEGERMAN, SAN FRANCISCO

UTAH SPIRITS *Everybody* resonates with this picture. There's something in the image that connects in some primal way. I was hiking in southeastern Utah, in a series of canyons called the Barrier Reef that has the most amazing rock art in North America. Panels of unbelievable beings, creatures, spirits... I did some watercolor sketches of these critters, and that night I started dreaming about them. It was scary, really. They'd just completely permeated my vision—imprinted themselves on me very deeply. So when I got back I digitized those pictures and started to work with them. It came from an ancient source, was interpreted through a dream space, and then manifested in art space.

O Brave New World 1992 © David Em /represented by Roberta Spieckerman, S.F.

O Brave New World

My primary agenda is creative, but there's also my assessment of state-of-the-art technology. So what I do may be more the product of analysis than creation. Particularly with 3D worlds, it took me so long to master various programs that I switched into a completely different mode—a "snapshot" mode. I thought, "What if I were Andy Warhol? I'll just move around in these virtual worlds and take snapshots. No worry about resolution." The point is to get in there, get the goods, and get back with them. It was incredibly liberating. I just started exploring.

"O Brave New World" was one of the first pictures to come out this. I created some fairly complex databases, set up characters in them, and then just went "click." It shows how good our imaging technology is getting. It's very low-res—like two or three hundred lines—but it looks great! And much the value of these images is that they're documents of unknown places.

Wombo 1992 © David Em /represented by Roberta Spieckerman, S.F.

Wombo

"Wombo" is a meditation on fertility. Creation as an aspect of fertility or vice-versa. Where does life come from? Where do ideas come from? It's all the same to me. I visualized this location—a Genesis space. As I was perceiving it—curiously enough in monochrome—this being just floated out of it. It excited me because it really was the birth of a spirit. I've made my name by creating environments, and now I'm *populating* the environments. This was a snapshot of a creative spirit forming itself. I was lucky to have been able to "snap the shutter" at that point and bring it home.

LAVENDER SPIRIT

I used to [illegible] all my time. Post-its when I was on the phone. I never look at them, just threw 'em in a box. One day I looked in the box and found all this unbelievable imagery. I scanned 50 to 100 in and started compositing them, painting on them, putting color into them, and moving them up into the superconscious state. I'd never done that before—taken the physical stuff that I do and moved it into an electronic space. "Lavender Spirit" (one of a series I did this way) is a mixture that bubbled up from Subconsciousland.

LAVENDER SPIRIT, 1992 © DAVID EK / REPRESENTED BY ROBERTA SPIEGELMAN, S.F.

SELF PORTRAIT 1992 © DAVID EM /REPRESENTED BY ROBERTA SPIEKERMAN, P.C.

SELF PORTRAIT One thing that attracted me to this medium early on was its "mirror" potential—the ability to see yourself in amplified ways. The space you explore in a self portrait is very "online." There's a feedback loop going on while you do this that dramatically heightens awareness. You're just sitting at a screen—the tips of your fingers are all that's moving, sometimes for thirty hours a stretch—yet you're very much alive. "Self Portrait" captures that sense of the brain in flames, brain on fire, moving, motion, creativity, feedback. M

REAL ARTifice

Artificial Reality is a term Myron Krueger coined back in 1974. Since then he has been called variously the father, grandfather and godfather of Artificial Reality. Whatever the paternity, Myron Krueger is an artist/scientist who has been creating computer-generated full-body telecommunication experiences for 23 years. He is also author of the books Artificial Reality *(Addison-Wesley, 1983) and* Artificial Reality II *(Addison-Wesley, 1991).*

VIDEOPLACE *is Dr. Krueger's interactive installation located—when not on tour—at the Connecticut Museum of Natural History in Storrs. Participants can perform digital painting, three dimensional gymnastics, touch one another, and perform other interactive feats in Cyberspace.*

—Jas. Morgan

MONDO 2000: Tell me Myron, how did you get like this?

MYRON KRUEGER: Well, it was quite unexpected. There was nothing more unlikely than for me to become an artist. I fouled out of any art class I had in grammar school. When I started working with computers in the mid-60's, I had a liberal arts background, so I was more interested in philosophical issues than transient technical problems. In particular, I was interested in the confrontation between man and machine—in the human-machine interface. If people were going to use computers all day, everyday, the design of such machines was not solely a technical problem—it was also an aesthetic one. *A lousy interface would mean a lousy life.* I decided that the proper goal was a beautiful interface.

JUST A PRETTY INTERFACE

When I wondered what a beautiful interface might be, I thought of artists with their brushes and musicians with their instruments. So, I taught a computer course for artists, in order to see how they might want to relate to computers. I found that computers didn't do anything artists cared about: they just sat there, read in programs, and spat out text. So, I hooked up a Moog synthesizer and a visual display, and created a system in which any program you wrote made sounds and visual patterns. While I was somewhat successful in moving artists towards technology, I was far more so in moving myself toward the arts.

While I had always thought of art and technology as antithetical, I discovered that it was not that artists didn't use technology, it was that the technology they used was obsolete. For the first time, I realized why I had never been interested in art. I imagined illiterate people who had never seen an illustration walking into a cathedral during the Renaissance. They would have been absolutely knocked out. I thought: that's what art should do—it should blow you away.

INTERACTIVITY ITSELF

During that time, I became aware that artists were using the computer to create art, but art as it was *traditionally understood*. I didn't know anything about art, but I did know about computers. It seemed to me that an art form based on the computer should be *impossible without it*.

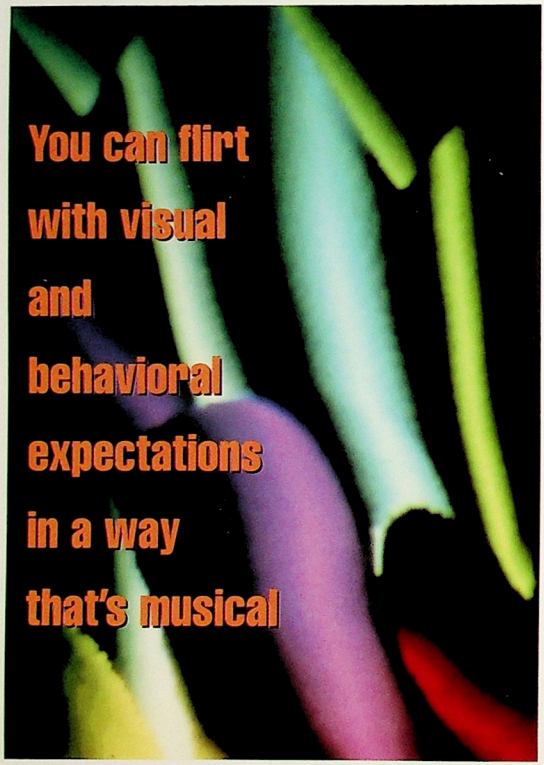
The unique capability the computer offered was its ability to make decisions in realtime—which implied an interactive art form. In fact, it was not enough to make art interactive, it was necessary to make interactivity *itself* the art form. When I imagined what such an art form might be like, it excited me the way I imagined that earlier art forms had moved those who created them.

When I tried to communicate my vision of an art form based on composed interactivity to artists, they weren't interested. It was simply too far from their definitions of art. Furthermore, they didn't have the

Jas. Morgan

Myron Krueger's Beautiful Interface

technical skills needed to conceptualize, let alone to implement it. The traditional fine arts were static, and this would be a temporal medium—more like music or film than painting. I realized that if I was going to see the kind of art that I wanted, *I* would have to do it.



PUNCH THE MONITOR

At that time, most artists, most intellectuals, and all self-described humanists were antagonistic towards technology. But I loved technology and the potential of computers. (I hated the way we program. I still do—I have a padded monitor so I won't punch it out). So I had a passion to communicate.

While I had originally wanted to use the computer to teach programming, I decided that most people didn't need to know how to program, or even how the computer worked. I wanted people to walk into a room, have a brief pleasant experience, and leave knowing that computers could be playful, creative, vested with the humanity of humane programmers. I thought in terms of an aesthetic medium that would celebrate technology and show how rich and unexpected the future would be.

That's how I got into it. It was an unexpected opportunity that touched everything—it was a cosmic concept. I reacted to VR in 1969 the way people do today.

WILL THE REAL BODY PLEASE STAND UP AND WIGGLE...

The thing I hated about computers was that you had to sit down to use them. (Actually, this has always been true of intellectual work). How could you talk about human-machine interaction when all you could do was wiggle your fingers on a 100-year-old keyboard? Some interaction!

I wanted to wiggle the rest of me. I wanted to use my whole body to interact with computers. At that time, computers received input from *users*. Instead, I wanted them to perceive *participants* in computer-generated experiences. I thought in terms of *Computer Controlled Responsive Environments* (That was the title of my 1974 dissertation. My term *artificial reality* was a little too far out for a dissertation title.)

FAKING A CYBORGANISM

In 1970, I didn't know how to get the computer to perceive people, so I faked it. In a show called METAPLAY, I used my own perception and my own intelligence to control computer graphic responses. I pointed a video camera at the computer graphic screen and projected the image onto one end of the gallery. (What I really wanted was a completely environmental display, with floor, walls and ceiling covered with computer-generated images.)

When people entered the gallery, they saw their images projected life-size in front of them. Then they saw computer graphic graffiti appearing on their images: I was drawing on their images with a data tablet a mile away. When they got the idea, they would duck when they saw the cursor coming towards them. Or bat it away. When I put a graphic ball at the top of the screen, they would reach up and hit it, and I would move it across the screen. Sometimes I would put my own image on the screen to interact with them.

Now, when I put my image on the screen, I noticed that they avoided touching my image with theirs, as if we were together—*they maintained a personal space around themselves.*

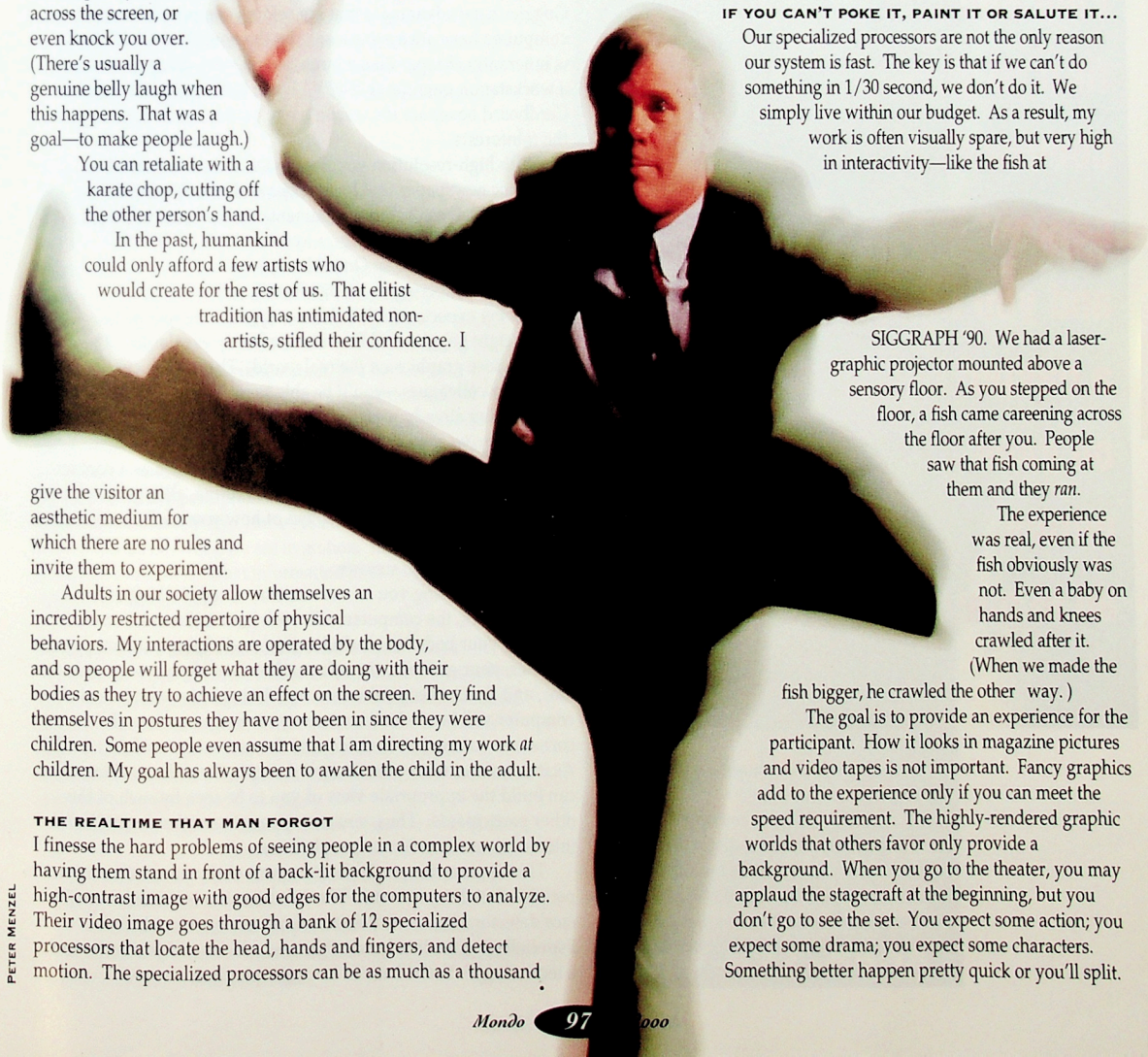
That led me to reformulate the concept of telecommunication—as creating a new place, maintained by the information that was available to all participants simultaneously. VIDEOPLACE was the name for such a space with no physical existence created with live video images and computer graphics.

GLOBAL, BUT ONLY IN MILWAUKEE

In 1974, the day after my Ph.D. orals, I went to Washington to propose a world-wide artificial reality with many participants as the theme of the Bicentennial. At NSF, they turned up their noses and said that it sounded like engineering. At NASA, they said there was a satellite that I could use—if I could get it launched.

Finally, I went to the one place that I was sure would be interested—the Japanese embassy. They were delighted at the thought of being part of our Bicentennial and were sure their government would want to participate. It was obvious then that the U.S. was a lazy tortoise and Japan a hard-working hare.

Myron Krueger



PETER MENZEL

Two years later, I received funding from the NEA, and VIDEOPLACE was an official Bicentennial project. It was shown on a less-than-global scale—two interconnected installations at the Milwaukee Art Museum.

WHAT A BLOW THAT GRAPHIC DEALT ME!

When you enter the VIDEOPLACE environment, you see your silhouette image life-size on a projection screen in front of you. The computer views you through a video camera below the screen. A graphic creature named CRITTER flies out on the screen and chases your image. If you hold out your hand, CRITTER will land on it. It's like playing with a pet. After a while, you can get it to do tricks. You can get it to dangle from your fingertip or even explode.

CRITTER is one of about 50 different interactions. When the image of a remote person touches yours, the contact may make a sound, push you across the screen, or even knock you over. (There's usually a genuine belly laugh when this happens. That was a goal—to make people laugh.) You can retaliate with a karate chop, cutting off the other person's hand.

In the past, humankind could only afford a few artists who would create for the rest of us. That elitist tradition has intimidated non-artists, stifled their confidence. I give the visitor an aesthetic medium for which there are no rules and invite them to experiment.

Adults in our society allow themselves an incredibly restricted repertoire of physical behaviors. My interactions are operated by the body, and so people will forget what they are doing with their bodies as they try to achieve an effect on the screen. They find themselves in postures they have not been in since they were children. Some people even assume that I am directing my work *at* children. My goal has always been to awaken the child in the adult.

THE REALTIME THAT MAN FORGOT

I finesse the hard problems of seeing people in a complex world by having them stand in front of a back-lit background to provide a high-contrast image with good edges for the computers to analyze. Their video image goes through a bank of 12 specialized processors that locate the head, hands and fingers, and detect motion. The specialized processors can be as much as a thousand times faster than off-the-shelf microprocessors. We have to have an instantaneous response.

Nobody else in the VR community even seems to *think* about realtime design. For years, software engineering people and computer scientists refused to think about speed. You wouldn't find more than two or three papers per decade on the subject. And they'd have titles like "The Lost World of Realtime Programming." Even now that they have conferences about it, they're not doing it. It's considered a lower form of activity. But it happens to be absolutely necessary for this work.

If the responses follow your actions instantaneously, you feel a real sense of cause and effect. The experience is *real*. That speed requirement is a cognitive imperative. If you have to wait for the response, you're distanced from the experience. Either you make it, or you are not doing it. Period. You don't show slides and say you're showing a movie. I don't understand how the head-mount crowd has exempted themselves from this requirement.

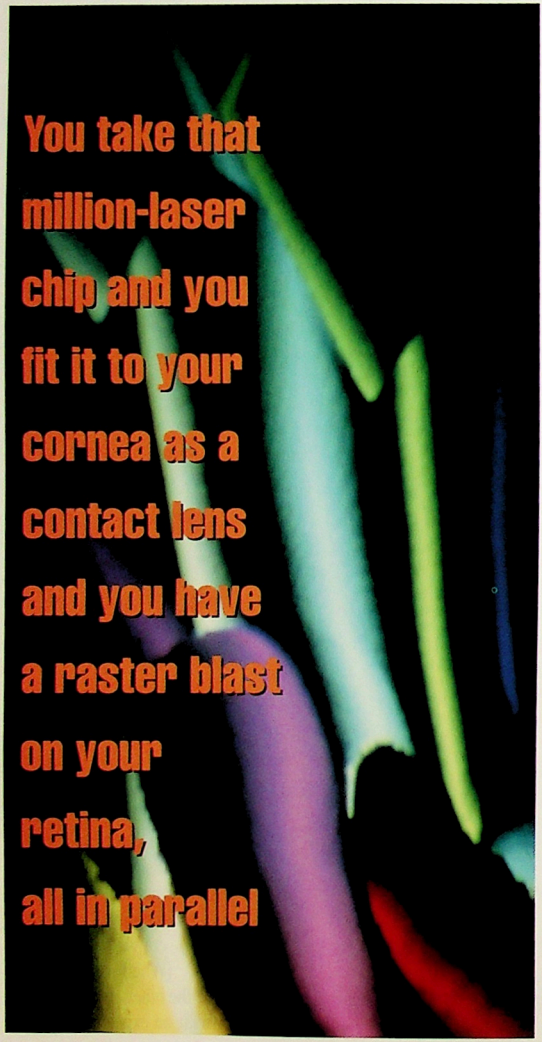
IF YOU CAN'T POKE IT, PAINT IT OR SALUTE IT...

Our specialized processors are not the only reason our system is fast. The key is that if we can't do something in 1/30 second, we don't do it. We simply live within our budget. As a result, my work is often visually spare, but very high in interactivity—like the fish at SIGGRAPH '90. We had a laser-graphic projector mounted above a sensory floor. As you stepped on the floor, a fish came careening across the floor after you. People saw that fish coming at them and they *ran*.

The experience was real, even if the fish obviously was not. Even a baby on hands and knees crawled after it. (When we made the fish bigger, he crawled the other way.)

The goal is to provide an experience for the participant. How it looks in magazine pictures and video tapes is not important. Fancy graphics add to the experience only if you can meet the speed requirement. The highly-rendered graphic worlds that others favor only provide a background. When you go to the theater, you may applaud the stagecraft at the beginning, but you don't go to see the set. You expect some action; you expect some drama; you expect some characters. Something better happen pretty quick or you'll split.

So I always thought in terms of minimum stagecraft, and worked on interactivity itself. I'm a minimalist. No matter how much visual clutter is onscreen, it's only stuff you can affect that matters.


You take that million-laser chip and you fit it to your cornea as a contact lens and you have a raster blast on your retina, all in parallel

SLOW, AWKWARD, YET LOW-RES

M2: Why are you opposed to the head-mounted displays?

MK: In its current form, the goggle-and-glove world offers an awkward interface that the user is expected to adapt to. It's not intuitive. You point and fly, instead of walking around. It's impossibly slow. The displays have the poorest resolution since the early PCs. I would be willing to say these problems are temporary, but the technology has been working for well over 20 years. Many of the problems are not due to limitations of today's technology. Untethered, walk-around interactions with 1/30 second delay between the participant's action and the system's response have been possible all along.

Then, part of my reaction is idiosyncratic. I don't like to wear things: watches, rings, glasses, or gloves. I was aware of Ivan Sutherland's work with a head-mounted display in the late 1960's. I saw that you could load people up with sensors, but I decided to focus on the development of a completely unencumbering technology that would let you come as you are. I wanted to make the real world virtual rather than cut you off from it. But I didn't think of this decision as permanent. I thought that I would do both technologies.

GOGGLE UP: SAVE A TREE!

Goggles have advantages that are seldom commented upon: computers have always been sold by the pound—a small display is inherently cheaper than a large one. It's the cheapest way to do a workstation monitor or HDTV. It can be shipped in a tiny box. Cardboard boxes are the reason we're cutting down the rainforests.

With high-resolution goggles, you will be able to read an electronic newspaper that looks like a real one. More forests saved! Why doesn't the environmental movement embrace electronic media? Ultimately, a low-cost head-mounted display with the resolution of an OmniMax theater will be irresistible—if it's as unencumbering as VIDEOPLACE.

It is my expectation that the two approaches will merge. The light-weight goggles will fit within ordinary eyeglasses. They will superimpose graphics on the real world. They won't cut you off from your colleagues—you'll be able to make eye contact with them. If you already wear corrective glasses, you'll look the same.

Or: they've already got a chip with a million lasers on it. You take that million laser thing and fit it to your cornea as a contact lens, and you have a raster blast on your retina, all in parallel. The contact lens solves the problem of how you track the eyeball.

DO NOT ATTEMPT TO RESIST

Instead of requiring you to wear instrumented clothing and special gloves, the computer will work from a three-dimensional model of your body that includes your underlying anatomy, your muscles, your gestures, the color and texture of your skin and hair, and the clothes you're wearing. Using video cameras, the computer will locate landmarks on your body—such as the corners of your eyes—to determine the current state of that model. As it calculates what your body is doing in three dimensions, it can build the appropriate view of you to be seen by each of the other participants. Thus, you can appear in another location and interact normally with the people there.

This approach is particularly important if you want to capture people's facial expressions. The video camera is the only sensible face detector I know of. You're completely unencumbered. Especially if you already wear glasses, why would you resist such a technology? You'd have to be pretty perverse.

OFF-WORLD EMPIRICISM

M2: What about education? The theme of your installation downstairs is that you can educate over a distance.

MK: In '76, I submitted a proposal to NSF to make children scientists landing on an alien planet. They would go into VIDEOPLACE individually and explore, and then they'd come out, compare notes, and realize that their experiences were totally different. Big kids, little kids, active kids, and inert kids would each uncover different phenomena, so they would need each other to discover all the rules. They would invent the concept of a critical experiment. They'd learn the process of science. It's not about mathematics. It's not about knowing the right answers. It's about trying to find out.

IT'S LIKE HAVING BEES IN YOUR HEADMOUNT

My favorite approach to education is to trust play as the proper way to learn. Young animals have never been observed to sit in chairs for long periods of time, so I can't imagine why we expect children to. I like to think of artificial reality as an electronic sandbox. A child could play with a swarm of intelligent bees or a constellation of stars. Such play would be enough to sophisticate the child. Then, what we typically consider education would be easy.

NEW HITS FROM THE OLFACTORY

M2: What would you do with HMDs today?

MK: The initial focus would be on adding the sense of smell. I have sketched out an olfactory delivery system. You would move through a graphic space and smell graphic flowers. In the beginning I'd play it straight, but then I might not be able to resist the temptation to attach a noxious odor to an attractive visual stimulus.

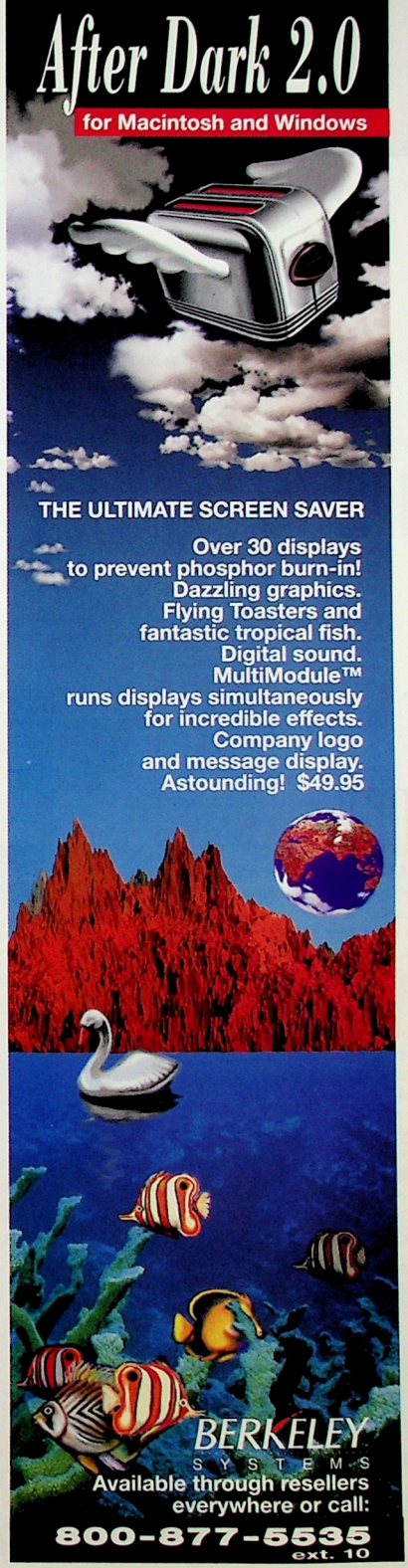
As you add more instrumentation, you have some interesting opportunities. With force and tactile feedback, the encumbering technology provides the ultimate Skinner Box. Since it dictates to your senses and monitors your every action, it can know exactly what information is reaching your brain. Thus, it can study perception as part of physical behavior rather than as a distinct activity. These systems will let us analyze how we use our senses while we are in motion. In particular, we will be able to understand what information athletes use as they operate at high speeds.

SENSATIONS FROM THE PHANTOM EVERYTHING

There are also purely tactile illusions. Researchers have shown that when a particular tendon in your arm is vibrated, you feel that your hand is extended. If this is done as you hold your nose, you feel that your arm has straightened. But, since you still feel your nose in your fingers, your brain's interpretation is that your nose grew like Pinocchio's.

In another effect, stimulation of two points on your body leads you to perceive a phantom sensation in between. In fact, it's possible to make you interpret a concrete sensation as coming from outside your body.

A psychologist might identify the features and factors that an artist can use as compositional elements. But the artist is best equipped to play with them. M2



Millennial Mall Mythology

Snow Crash

by Stan Kelly-Bootle

SNOW CRASH
by Neal Stephenson
Spectra, Bantam Books, 1992
$10.00

"Virus, drug, religion... what's the difference?"

William Gibson called it "Fast-forward free-style mall-mythology for the early 21st century." *Snow Crash* takes on a whole slew of nasty contemporary trends and extrapolates them hilariously into a pessimistic and unlikely near-future. The result is a sort of Swiftian (both Tom and Jonathan) super-high tech James Bond adventure. It's the early 21st century: the future of mankind is threatened by a bigspending villain and saved by a young HeldenHacker.

The "Snow Crash" of the title is a deadly, stultifying designer drug, the key to world domination. Although Law-and-Order have totally vanished, computer technology has made remarkable progress: you can escape the pandemic anarchy by goggling into the Metaverse, a cyberspace product that even upstages David Galernter's World Processing by Mirrors! There are also dangers lurking in the Metaverse: a supervirus bitmap that attacks the neural networks of systems programmers, reducing them to zombies. To which I retort, "How could you tell?"

The multi-threaded plot moves along nicely with lots of advanced gore and enough high tech action to challenge LucasFilm and Silicon Graphics. (The book has "film rights" written all over it.) Exactly how far ahead *Snow Crash* takes us is not explicit. The only firm date I recall is that the father of our hacker hero, Hiro Protagonist, joined the army in 1944 at the age of sixteen. Hiro was born in 1988 at the latest, giving us a setting of about 2020.

Now let's consider some of the ills that, according to author Stephenson, will escalate ad nauseam:

- Urban decay and street crime progress to complete lawlessness and global Balkanization: tiny burbclaves and various heavily-guarded ethnic-sovereign territories abound. The result is a wonderful array of private police forces, computerized security devices, and high tech self-defense products. Even the CIA has been privatised as the CIC (Central Intelligence Corporation). The "Fed" has survived but its exact role is unclear. Fed employees are polygraphed daily and undergo continuous drug tests. There's an automated, nuclear Pit Bull Terrier called the Rat Thing, and Y.T. (Yours Truly), the blonde 15-year old heroine, wears a "dentata" in the obvious place to deter sexual harassment.
- The madcap bicycle-and-rollerskate delivery system used in San Francisco has matured into a major Kourier service. Kouriers such as Y.T. get around on sophisticated skateboards by "pooning" a magnetic harpoon onto passing vehicles.
- *Everything* is franchised! In particular, the Pizza industry is controlled by the Mafia's Uncle Enzo, so home-delivery deadlines are strictly enforced! The Alaska Highway has become "the world's largest franchise ghetto, a one-dimensional city two thousand miles long."
- Inflation—naturally—beyond the nightmares of the Weimar Republic: "Y.T. opens the glove compartment... and finds a thick bundle of worn-out, dirty, trillion-dollar bills. Ed Meeses. 'Jeeze, couldn't you get any Gippers? This is kind of bulky.'" The Fed boghouse walls warn you not to asswipe with old billion-dollar bills.
- Religion: Elvis has joined the Trinity in one of the cults. Naturally, brain-washing conversions are achieved in nasty, cybernetic ways.

Hiro's Herculean *Heldentat*, of course, is to save Hackerdom by nailing the naughty metavirus, *also* known as Snow Crash (whence the drug = virus equation). Rather than unheroically buying Norton's Utilities and ending the saga prematurely, Hiro engages in some protracted etiological research. The viral bitmap turns out to be some kind of *nam-shub*, a Babylonian incantation devised by Enki to reprogram the

Chomskian regions of the brain and mutate the victim's DNA. The resulting bursts of "ba ka na ru bi" are not your standard SciFi alienspeak, they are real Sumerian syllables, the magical language shared by all the tribes until Yahweh's big cockup at Babel (see Genesis 11:1-9).

Hiro has a crash course in diachronic sociolinguistics and religious syncretism. The lessons in Babylonian cosmogony and Church History provide erudite interludes between the Japanese swordplay and diverse bursts of bloody mayhem. With miscellaneous body parts flying all about, Hiro manages to log his laptop to the Metaverse Librarian. This silicon polymath out-HALs HAL by answering research questions posed in idiomatic, spoken English:

"The thing that looks like a tree?" Hiro says, gesturing to one of the artifacts. "A totem of the goddess Asherah," the Librarian says crisply, "She was the consort of El, who is also known as Yahweh... the Greeks knew her as Dione or Rhea... the Canaanites knew her as Tannit or Hawwa, which is the same thing as Eve."

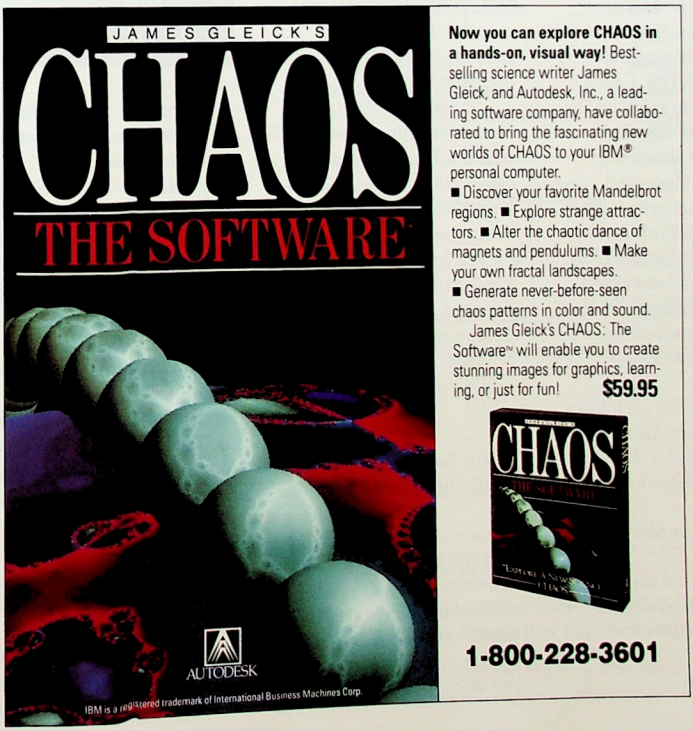
Thus we are led into the Joseph Campbell hit-or-myth maze of ancient pantheons, trying hard to remember Who did What to Whom.

The Metaverse Librarian, alas, is not always in agreement with current scholarship: Asherah's stock epithet in Ugaritic, *rbt 'atrt ym*, is no longer, *pace* F.M. Cross, taken to mean "she who treads on the sea (dragon)," but simply as "Lady Athirat of the sea." Hence the subsequent plot buildup of Asherah as the "defeater of chaos" is flawed. Or, perhaps the scholars of 2050 AD have uncovered some new tablets? In any case, the exegesis is fun, and accurate enough to carry the plot, rather like the archaeology in *Raiders of the Lost Ark*.

One minor quibble I have with Neal Stephenson's style is the compulsion to explain things, as though the reader cannot be trusted to fill the gaps. Thus we have digressions while characters explain to other characters familiar phrases such as "operating system," "in vitro," and even (not again!), "binary notation." But perhaps this is not Neal Stephenson's fault, but that of an overzealous editor.

For mall-mythology, this is pretty steep stuff. Whether you write your own incantations in Babylonian or in C, this is one book to chill out with this summer. M2

Liverpool-Irish Stan Kelly-Bootle writes the "Devil's Advocate" column in UNIX Review. *He worked on EDSAC I at Cambridge in the 1950's and is the author of nine books, the latest being* Understanding UNIX *(Sybex). Judy Collins sings his Liverpool Lullaby on her* In My Life *LP.*



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Tonguing the Zeitgeist

Storming the Reality Studio

Lance Olsen

Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Fiction
Ed. Larry McCaffery
Duke University Press, 1991
$17.95

THE TOILET WAS FULL OF NIETZSCHE

Shortly after the appearance of William Gibson's supernova *Neuromancer* in 1984, Gardner Dozois wrote an article for *The Washington Post* referring to Gibson, Lewis Shiner, Bruce Sterling, John Shirley and a handful of other techno-urban-blister-eyed-visionary literary guerrillas as "cyberpunks." A genre was born—and almost immediately infected with the deadly viruses of Self-Consciousness and Auto-Replication.

While Sterling got into the glitz of the Name Game, Gibson, Shiner, and Shirley almost immediately began to recoil from it.

There *was* no Movement, they said.

People should talk about them as individual authors, not parts of a collective consciousness.

Yeah. Sure.

FROTHING THE SYNAPTIC BATH

Even as they spoke, clones sprung up like those zombies in *Night of the Living Dead*.

You just couldn't kill them.

By 1989 scholars were meeting in Leeds, England, at a Cyberpunk Conference to figure out what the hell had just happened. (Always a pre-mortal symptom.)

At the turn of this decade Shiner was writing a piece for *The New York Times* claiming cyberpunk should be defunct—if it wasn't defunct already.

It seems so easy, doesn't it?

À la Imagism, à la Vorticism, à la Dada, cyberpunk birthed, grew, and died within maybe three years. Four, tops.

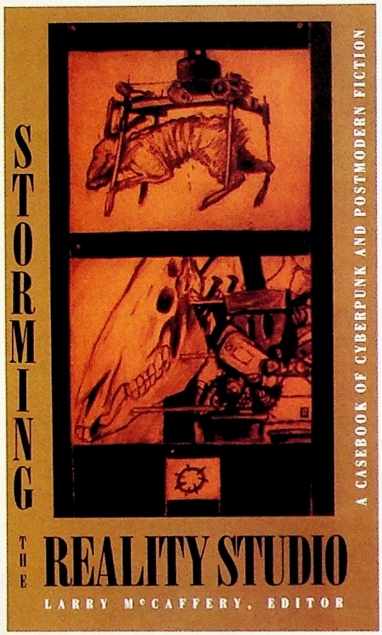
Yeah. Sure.

Only look outside your *window*.

Storm the reality studio. and retake the universe.
—William S. Burroughs

Only it never was a literary movement, never something someone like Gibson could have created or Shiner destroyed.

The news is: *it's bigger than they were. WAY bigger.*



It's no mere literary fashion statement, but a cultural frame of mind. It's no mere SF fad, but a Way of Seeing.

We're talking *Zeitgeist* here.

Nothing more, nothing less.

That's what Larry McCaffery's onto in this brilliant new compilation of fiction and nonfiction he's edited that you've just *got* to read: *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Fiction*, whose cover won the American Association of University Presses Design Award and whose thesis is simple as a whitehot razor blade: we don't *read* science fiction, we *live* it.

After an intro by McCaffery, the academic guru of the pomo overview, about how cyberpunk has moved SF out of the literary ghetto and right into our tribe's face, there follows an annotated list of artifacts from Shelley's *Frankenstein* to Sonic Youth's *Daydream Nation* that helped shape the cyberpunk sensibility; twenty-nine electric poems and prose chips from the grandfathers of the stuff like J.G. Ballard and Thomas Pynchon to their hardwired mutant offspring like Pat Cadigan, Richard Kadrey, and Misha; and twenty pieces of nonfiction, including seminal teeth-chattering pomo-bites by Jean Baudrillard, Jacques Derrida, and Jean-François Lyotard to hip samples by *SF Eye*'s Steve Brown (giving his own version of the The Birth), Timothy Leary (claiming computers will be this decade's LSD), and Gibson Himself (admitting, among other things, just how little he knows about how computers actually work).

You can't help getting excited about this collection. You just can't. It does nothing less than assemble a 1990's canon of postmodernity that dogs earlier ones containing first-generation pomo creators like Donald Barthelme, Edward Kienholz, and John Cage.

It's about your world.

It's about the way you live.

And it's going eat your smile right off.

YOUR VERY OWN CYBERPUNK CHECKLIST, OR: FISTIC HERMAPHRODITES

You know you're not in Kansas anymore when:

• Technology shapes your life and, like the Italian Futurists, you love it. Like Andy Warhol, you want to be a machine.

• You find yourself adjusting to speedshifts of trends like a dolphin riding shockwaves at the bow of a ship. Turbulence alone is a turn-on.

• Nonetheless, multinationals control your life by controlling vast databanks, the new powerbase at the end of this millennium.

• Your dimension is pervaded by high-tech affectless lowlifes—postpunk criminal outsiders, hustlers, anarchists, black marketeers—whose primary motivation is survival.

• Experience is time-dated. You want it fresh and new in any form: designer drugs, satellite dishes, video games and recorders, digital cassettes, high-definition television, MTV logos. Good sex is new software.

• You adore Ridley Scott's *Blade Runner* but can't understand why people think of its intensity, vitality, and dark humor as science fiction. *You* think they should just look outside their windows.

• You feel old at twenty-five.

METROPHAGE

Many of these quandaries can be framed within age-old, venerable terminologies that go back as far as Plato and Eastern mysticism: What is real and what is illusion? What does it mean to be "alive"? or "dead"? to be "conscious"? to be "immortal"?... Speculative abstractions have now suddenly become literalized.

—Larry McCaffery

I was left here by mistake by this time machine from the future.

—Lewis Shiner

The postmodern would be that which... searches for new presentations, not in order to enjoy them but in order to impart a stronger sense of the unpresentable.

—Jean-François Lyotard

YOUR MIND IS A NIGHTMARE THAT HAS BEEN EATING YOU NOW EAT YOUR MIND.

—Kathy Acker

A machine has no concern for whether its actions are right or wrong; a machine has no use for morality in the human sense. All it wants to do is... Well it's like a MISSILE, you know, with one of those high-explosive warheads. Think of the High Explosive as like the BRAIN. All it wants to do is EXPLODE.

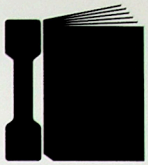
—Mark Pauline quoted by William T. Vollman

I was an infinitely hot and dense dot. So begins the autobiography of a feral child who was raised by huge and lurid puppets...

—Mark Leyner

If you think MTV logos are too slow, then you feel old at twenty five.

Lance Olsen's study of Gibson and cyberpunk will be published this summer by Starmont House. M2



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WAX

or

the Discovery of Television Among the Bees

Richard Kadrey

Throughout the history of the film biz there have been occasional attempts to shoot whole novels. The silent era gave us *Greed*, a 12-hour misery-fest that was ultimately chopped up and sold as guitar picks by the studio heads. Fassbinder was more successful with his 15-hour *Berlin Alexanderplatz*, but, shown in installments on TV, it lacked the total impact.

In the literary world, J.G. Ballard experimented with "condensed novels" in *The Atrocity Exhibition*. The idea was to boil away all character and plot and leave only the steaming residue of motive, action and response, amassing the force of a novel in just a few pages.

David Blair's video, *WAX or the Discovery of Television Among the Bees*, takes narrative compression to a whole new level. Through a combination of archival film, new video and computer animation. It achieves the effect of a novel, and does so in 85 retina-battering minutes.

It's almost impossible to describe the plot: it's a Zen koan told as a Burroughs cut-up. We open with experimental cinematographer James Maker, a member of the Supernormal Film Society who accompanies a British Royal expedition to Antarctica in hopes of filming the spirits of the dead. Flashforward to James Maker's grandson, Jacob Maker, a computer programmer doing targeting systems for the Army at their Alamogordo test range. Jacob keeps bees, the bees that once belonged to his father, and his grandfather before him. But these are no ordinary bees. Their pedigree goes back to ancient Mesopotamia [*whimsical Victorian footage here*].

Jacob grows unsure of the work he is doing for the Army, telling us, "To hit a simulated target was to prepare murder against a real target." As his uncertainty grows, he spends more and more time with the bees. He has blackouts; time turns liquid. The hives fascinate him endlessly. And one day, he thinks he can hear voices speaking to him from inside the hives...

He embarks on a Ballardian quest that takes him from his home in Alamogordo, to Trinity site (location of the first nuclear bomb detonation, coincidentally on the day of Jacob's birth), to the underground lair that is the real home of the bees (where the bees commune with the dead, and prepare new bodies for them), to the Land of the Dead itself and to Iraq during the Gulf War. Jacob leaves every semblance of normal waking reality and is reborn briefly as a bomb, guiding himself with the same targeting system he worked on back when he was a programmer.

WAX is one man's crazed, quirky vision. Blair labored six years to finish *WAX*, working when he could from grant to grant, scrounging and convincing people to contribute to the project through the force of his vision, the strength of which shows in the extraordinary production quality of *WAX*. The scenes set in Alamogordo and Trinity Site were filmed at those locations. Blair convinced the Air Force to let him take his video crew deep inside the highly restricted WSMR bomb range. While Blair and company were shooting, some local doughboys ran a kiloton-level blast simulation. A small chemical explosive sent up a statuesque white mushroom cloud, which cinematographer Mark Kaplan captured by chance, and Blair incorporated into the film. Stealth-painted B-52s were practicing runs overhead, using the Trinity marker as ground zero on their targeting grids—Blair and crew worked under virtual bombardment the whole time they were filming.

WAX has a striking underground sequence where the bees make wax bodies for the dead to inhabit. Blair shot this in off-limits sections of Carlsbad Caverns, conning and cajoling his way into sectors that even park rangers avoid.

When Jacob enters the Land of the Dead, the audience tours the afterlife in Florence Ormezzano's computer graphics. The images are startling, from the bat-winged and multi-skulled spirit guide to the biomorphic squiggles that are the alphabet of the dead. These are dream images from a lost digital tribe, pixelated runes and hieroglyphs—what the Mayans

PHOTO COURTESY OF MARK KAPLAN

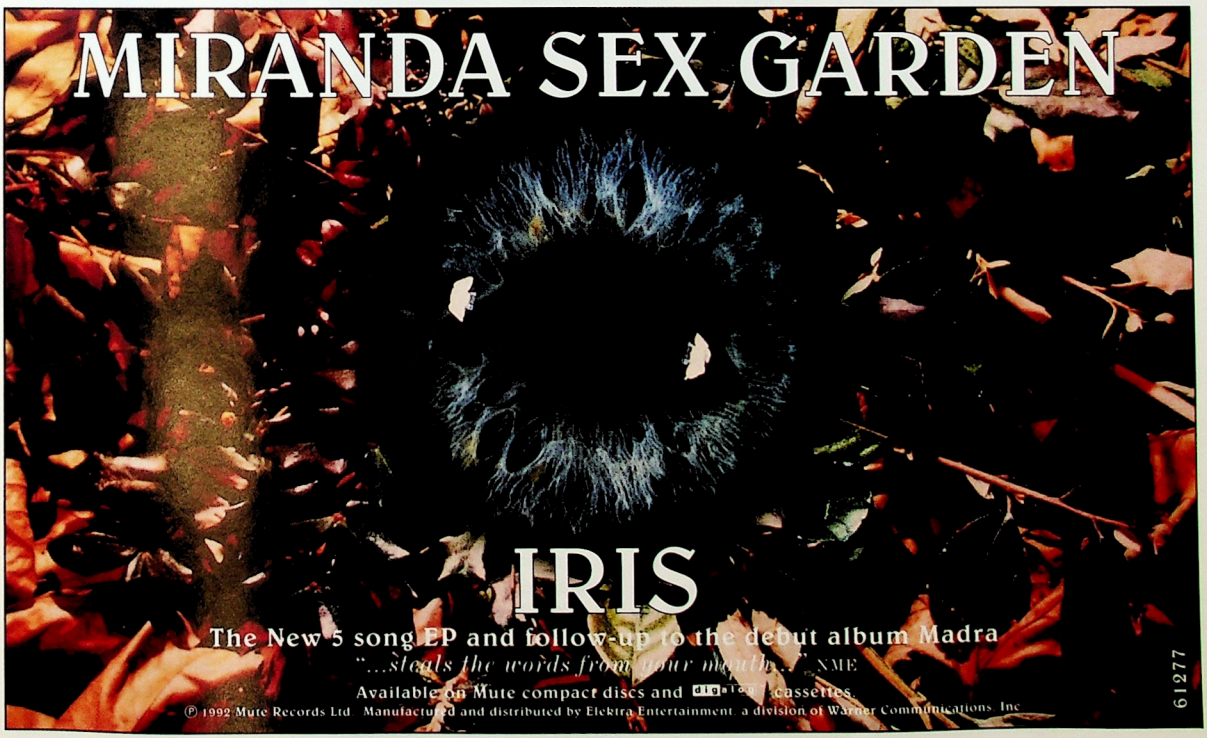
might have left behind if they had vanished into a virtual world.

WAX is the first generation of a new video-based artform that Blair calls "independent electronic cinema." Like the zine you hold in your hands, video cinematography blossoms from new digital image-processing tools. *WAX* was assembled using the Montage Picture Processor, a relatively new "non-linear" video editor, which allowed Blair to work quickly and intuitively, cutting and pasting the work together from as many as 17 video segments at once. The system allowed Brooks Williams and Beo Morales to layer their original musical score to finish the project.

Blair, however, is paying a price for his innovative audacity: nobody wants to show or distribute *WAX*. The art video crowd has rejected it because it's too long and too expensive—a PC no-no. The film community is strictly hands-off because *WAX* is video-based. The New always has its problems. Tuxedoed and tiaraed royals rioted at the première of the *Rite of Spring*...

Blair is optimistic, though. With praise from the likes of William Gibson and German independent television critics, he knows he accomplished what he set out to. He's already at work on a new feature—an alternate history piece linking the fate of the modern Japanese and Jews in an alternate Israel located in Manchuria. Not the kind of material to give *Terminator 9* an extended run for its money, but Blair works a different territory—where film has the density of a novel, where memories, dreams and desires are as close as your skin, and as dangerous as a smart bomb. M2

500 signed and numbered VHS videocassettes of WAX or the Discovery of Television Among the Bees *are available for $36 postpaid from, David Blair, Box 174, Cooper Station, New York, NY 10276. Destined to become a cult classic—get them while they last.*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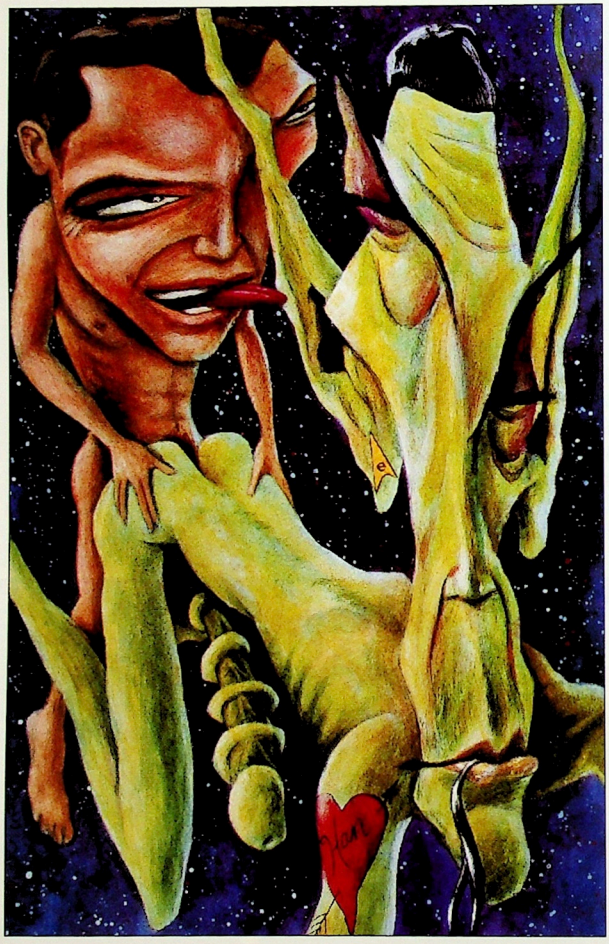
TECHNO-CULTURE



Technoculture
Constance Penley &
Andrew Ross, Editors
University of Minnesota Press,
1991

I crack Technoculture *and it falls open to page 157. Yow! Mr. Spock and Captain Kirk—yes, Spock/Kirk—stripped of their Star Fleet uniforms, earthily embracing. Kirk has standard-issue Terran equipment (albeit heroically proportioned), but Spock is endowed with a knurled unit that reminds me of the "ribbed for her pleasure" condom machines in sleazy men's rooms.*

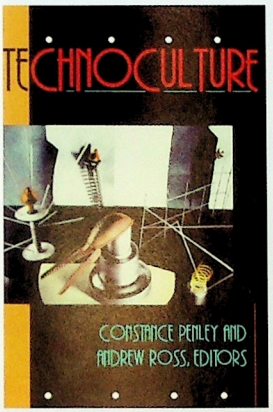
Quickly zapping the 256-grayscale scanner across the image for future ah—bricolage, I dive into the essay by Technoculture*'s co-editor, Constance Penley, on the S/K or "slash" genre of Trekkie erotica. Written by and for women, slash smut idealizes a homosexual relationship between Spock and Kirk, minutely detailing their love, physical and emotional. The opening lines about "boldly going where no man has gone before" will never sound the same.*

Then I get linear and start at the front. Key phrases pop out: "the critical left," "colonizing intentions," "late capitalism"—hey, wait a second, could it be...?

Yep. This here's a commie book. Well, sort of. It falls in the tradition of literary Marxism (the only Marxism still extant, most places). The editors, Penley of UC Santa Barbara and Andrew Ross of Princeton, declare themselves to be socialists: a term that makes me think of the '30s—ringing steel and smokestacks, evil capitalists, the Internationale...

Rolf Knutson

Eric White



firepower—altering the economic base. They were a dour lot, but truly kicked some bourgeois ass.

That was then. Fredric Jameson, perhaps today's leading Marxist theoretician, proposes that "cognitive mapping" of postmodernism is the "socialist project" for the fin de millennium. In other words, just taking today's onslaught of sounds, images, words, objects, ideas, and acts and placing them in context is pretty damn revolutionary. The owner of a 100-channel-plus satellite dish or anyone who strolls in Shinjuku at dusk is pressed to disagree.

DON'T MOURN—CYBORGANIZE!

This neo-Marxism has been tweaked by Freudians and structuralists, and incorporates the New Left power movements—racial, gender, and sexual-identity (all rooted, note, in biology rather than economics). Thus, the new "critical progressivism" is a seeking cyborg: living, yearning flesh grafted onto a creaky steel-girder skeleton, searching, always searching, for occult signs of revolution in pop culture.

The essays in this collection present recent sightings.

For example, Penley's piece about S/K Trekkies. While the fans insist they chronicle the erotic adventures of Spock and Kirk just for fun, Penley—while admitting that possibility—embarks on her "socialist project" of "cognitive mapping." She suggests it's because they despair of the possibility for equal relationships with men, and feel a profound alienation from their own female bodies. Women's bodies are, in the late 20th century, "a legal, moral, and religious battleground" that are "held to painfully greater standards of physical beauty than those of the other sex." Seeking alternatives to all this—even unto idealizing galactic gay love between TV characters—seems not only *logical*, but necessary.

Her analysis is poignantly convincing. We're teetering on the edge of something important here. And the answer is...? Well, there isn't one. Except that men have to be re-shaped and it probably won't happen in our lifetimes.

(I will admit, as a man, a little trepidation about being re-shaped by activists in a genre called "slash.")

THE CIGAR THAT EXPLODED

Along with gathering supporting details and assigning importance to those details—why in academia must things *signify*, instead of just *be*?—some incredible projections get made. For example, when Professor Penley gets her 'zine, *its envelope is sometimes ripped.* The 'zine editors claim it's because they can't afford heavy-duty envelopes.

But in the world of cultural criticism that cigar is never just a cigar. "I have often suspected," Penley writes, "that an important element of this fandom's pleasure lies in the illicit thrill of receiving in the mail (to the stares and smiles of one's mail carrier, friends, families, or colleagues) a half-torn envelope revealing some particularly juicy drawing of Kirk and Spock, their naked bodies arranged in some near-impossible position."

Mail call at the University of Santa Barbara probably hasn't been the same since Constance joined the staff.

And so it goes throughout the entire volume. An insightful point is made, then a riff on some peripheral aspect almost brings down the logical house of cards. Always prancing—stepping nimbly through the ideology and the technology and ever so artfully back to the premise...

BIGFOOT CRUNCHING MAINFRAMES, YEEEEEE-HAW!

Not that the essays aren't insightful. Co-editor Andrew Ross' "Hacking at the Counter-culture" offers a lucid view of "virus hysteria" and the hacker subculture, neither glorifying nor decrying. Discussions of AIDS treatment activism and the fight for reproductive rights are cogent. And check out Sandra Buckley's "Penguin in Bondage," on the development of Japanese pornography from Edo-era woodcuts to sadomasochist software.

(I must protest, however, Jim Pomeroy's characterizing Survival Research's destructo performances as the equivalent of "such redneck 'sports' as female mud wrestling or Big-Foot tractor stomps." Not because he's inaccurate, *but because he thinks this is bad.*)

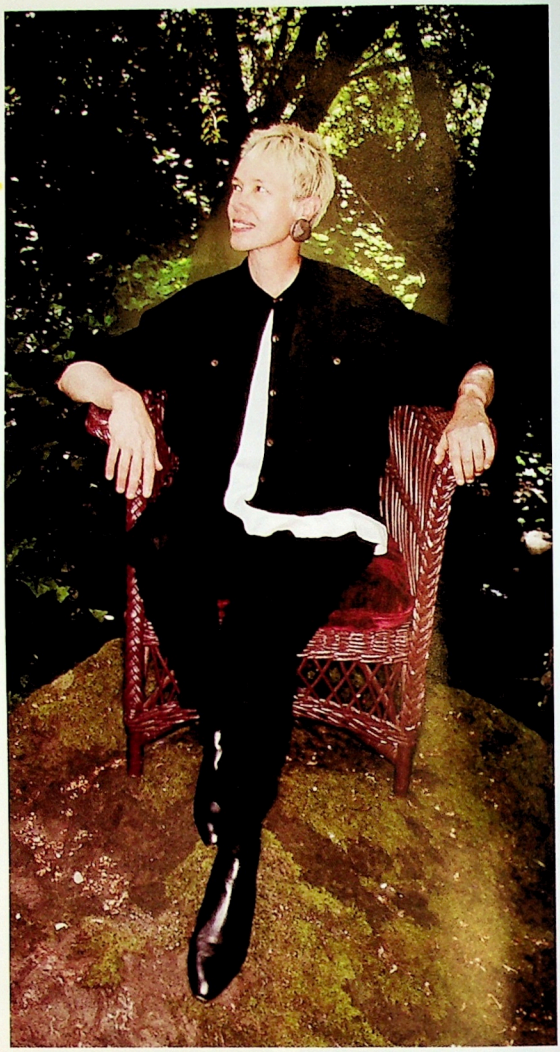
THIS RAILGUN GOES BEHIND THE MAILBOX

But what rough beast slouches toward Cyberia? I think of the cyberpunks I ran into recently who quite seriously plan the fortification of an autonomous free zone with rail guns and other do-it-yourself heavy weaponry, or the anarcho-libertarian packet radio freaks setting up their own consensual, encrypted Matrix, or the technosurvivalist commune in the hills above Silicon Valley stockpiling food, weapons, and computers. Crazy? Uh-huh. Apocalyptic? You bet. Frighteningly crude? Undoubtedly. Yet somehow meaning-full, somehow more significant than signifier.

Meanwhile, back in the pages of *Technoculture*, stylized pop icons wank each other to everyone's satisfaction. And all I can say is: *Hey, professor... will* this *be on the test?*

W. Rolf Knutson is completing his novel, Strange Attractors, *refining his C++, and practicing his handgun drills.*

Radioactive 50-ft. Woman Has Period in Space!



BART NAGEL

Constance Penley shares responsibility for Technoculture *with co-editor Andrew Ross. Charming and soft-spoken, she should be read with a southern accent. Known for her many books, including* Close Encounters: Film, Feminism and Science Fiction, *she is an editor of* Camera Obscura, *the nation's snappiest film/feminism journal. She currently teaches at UC Santa Barbara. For talking to me I sent her one of my signature T-shirts: "Postmodernism? Couldn't Care Less!"*

—Robin Moore

Robin Moore

SCIENCE AS A PRIZE IN A CRACKERBACK JOX

CONSTANCE PENLEY: Canned cultures like Biosphere II are interesting because they are one place where ideology is more important than actual information. Real science projects have to project themselves like this to be popular. For example, NASA modelled itself on *Star Trek*. They had a hard time getting support for the manned space program—scientists know you get much more information from unmanned flights—so they tried to tap into people's love of *Star Trek*. They named the first shuttle the *Enterprise*. They hired Nichelle Nichols—Lieutenant Uhuru—to run a recruiting program for women and minorities in the astronaut program. The *Challenger* crew was modelled on a kind of *Star Trek* lineup: a mixed-race, mixed-sex crew.

MONDO 2000: What's your take on MONDO and the sexification of technological culture? Do you think it goes too far in glamorizing tech?

CP: I *like* projects that go too far. I loved *JFK*. This time [Stone's] insanity went the right way. Just when people are feeling Iran-Contra is never going to move, here comes someone making a film on conspiracy, coverups, etc. Now that kind of frothing at the mouth, being a little too shrill—I *love* the way it breaks the smugness of what passes for political discourse in this country. We always find issues of sexuality and sexual difference around technology. I teach a science fiction film course where right from the beginning, anxiety about technology gets projected onto women's bodies. In the class we go from Melies' *Trip to the Moon*, through Godard's *Alphaville*, to *Blade Runner*. Just take *Metropolis*. Fears about emerging technology get projected onto the body of the

woman becoming a robot. And the number of exploding/radioactive women in science fiction film is phenomenal!

When I was doing all this *Challenger* explosion and Christa MacAuliffe research, I was collecting kids' sick jokes about it. The very first one I heard was: "What were Christa MacAuliffe's last words? 'Hey guys, what's *this* button?'"

M2: It's too consistent to just be a pattern of scapegoating women...

CP: Right: when technology was on the rise, women's political power was increasing. I think fear of technology being out of control and fear of women being out of control got conflated.

M2: It clearly fits into Christian ideas of sin—the apple as techno-knowledge. And technology seems to be an equalizer, physically.

CP: When women were tested in the early phases of the astronaut program in the '60s, they were better *in every skill!* There was a famous article in *Ms.* magazine in 1973 about this. Women had more stamina, more dexterity, more psychological stability...

M2: I remember hearing women couldn't be astronauts because of some weird thing about menstruation! They weren't sure if gravity was necessary. And I thought—I was 12 then—they can send a man to the moon, but they don't understand tampons? Wouldn't it be worth it, on the verge of a new age, *to find out?!?*

Aroused by the space-period question, I called OB/GYN at NASA's Johnson Space Center. Dr. Richard Jennings was kind enough to answer my questions. He said women were excluded from the early space program because President Eisenhower decided that 1500 hours of training at the Test Pilot school would also be required—and the academy at that time excluded women.

He also gave me a history of the prejudices against women in aviation, which were doubtless inherited by NASA. There were accidents in the 1920's involving menstruating women pilots—like a wing of the plane coming off—that were fully exploited by journalists.

About menstruation in space, he said "Even if there were a problem—there still wouldn't be a problem." Retrograde (backflowing) menstruation has never been found to have any consequences. "So do they just bring tampons along on space flights?" "Basically, yes." Other options available for years to Olympic athletes and mountain climbers have been suppression with pills or menstrual extraction. M2

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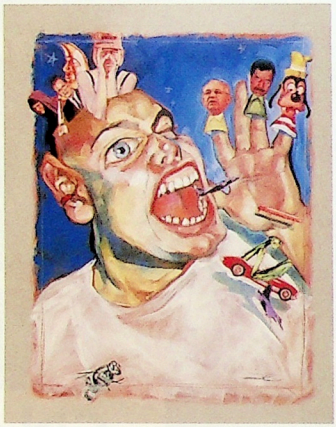
puppet-clown Reagan) and abandon the MIAs (along with Vietnam-war MIAs who know about his massive Burmese drug smuggling on U.S. Army-built jungle roads from poppy fields and U.S. Air Force cargo planes), pay off his drug-smuggling puppet governments in South America (especially Colombia and Panama), arrange for AT&T outages and paralysis of the Air Traffic Control system and Wall Street system to shock-test the system, send weapons to his good buddy Saddam in Iraq via Jordan during the war to keep the fight going and justify the war, and destabilize the Russian Federation with his New World Order co-conspirator Gorbachev, using famines, mass poverty, massive radioactive poisoning of all water throughout Russia (reported by people coming back but not in the media), medical crises with no drugs available, and 30,000 nukes for sale to the Mideast to foment global fear and justify the Neue Welt Order.

PHASE 4: ELECTRONIC MASS CONTROL. No, Bush's role is over. The Illuminati script writers, creators of the "thousand points of light" mantra, need a new electronic Adolf to create the *real* (computerized) new world order, complete with remote-control electronic implants for monitoring everyone and a cashless society with all transactions neatly tracked, to design an all-electronic consensus and voting system so everyone's political leanings and dangerous ideas can be monitored and dissidents weeded out while elected congressional leaders can be neatly bypassed, and implement mass social engineering by analysis and an automated spreadsheet society for total predictability and manipulation. Someone who has already developed automated people monitoring systems (such as social security and insurance records), stored and massages massive amounts of confidential data for major corporations, has access to hundreds of millions of private citizen's records on all of us, has top intelligence agency contacts, whose publicly-stated Gestapo/KGB-style anti-drug policy is abolish the constitution and sweep the houses of "undesirables" for drugs and weapons without a search warrant, an ex-military officer who already has a fanatic disciplined ex-military volunteer cadre ready to blindly follow orders, and an insatiable drive to be the world's richest man and global information czar. Now who could that be? You guessed it: our "stealth candidate" HERR ROSS PEROT, the new choice of the Illuminati and its secret world government run by the Bilderberg Group in Switzerland and its minions, the Jason Society (AKA Order of the Quest), which runs the Council on Foreign Relations and the Trilateral Commission under Perot buddy David Rockefeller (and its spinoff the Jason Group of mad scientists with their SDI and alien



technologies), the Knights Templar and Knights of Malta and their fascistic wannabe world dictator Pope John II (the ex-cyanide gas salesman to Nazi concentration camps like his Nazi-symp predecessor), the murdering Masons, the rabble-rousing Jesuit instigators of civil wars, and other creators of the Luciferian totalitarian new world order socialist state with its mass population-control program implemented by the Club of Rome and the Haig-Kissinger depopulation policy: mass death by manipulating populations like Iran, where Perot, good ole boy pal of mass-murderer Shah of Iran, created the ultimate automated "social security" (fascist thought control) system, instigating them to fight their neighbors by heavily arming them as well as Iraq, economic collapse through trillions in wasted tax money for payoffs to special interests, such as so-called social-welfare federal programs like Medicare designed to illegally pay off Nixon campaign contributor and Nixon close friend and advisor, "welfare billionaire" Perot—see *Village Voice* May 26, 1992), manipulated famines, massive control of the population via drug addiction, genocide against undesirables (blacks, Hispanics, and homosexuals) via CIA MK-NOAMI biological warfare/AIDS program, uranium tailings in tobacco fields, malathion spraying in L.A. (helicopters from Evergreen CIA base in Arizona), dioxin and other massive poisoning of drinking water, deforestation, and poison-meat-eating deterioration of the species and destruction of rain forests. With the entire population of the insane asylum (the Earth) closely monitored by its worst paranoids, lead by NSA "ex" director and Perot close pal, Bobby Inman and "ex" Reagan intelligence advisor. By the way, I predict that the New World Order starts on June 27, Perot's birthday, when he will announce his candidacy for president (world dictator).

PHASE 5: MULTI-LEVEL ALIEN DISINFORMATION CAMPAIGN. (Already in operation since late 40's). Current target: L.A., tied into riots. Updates: CBS runs scary Intruders mini-series TV show timed for just after L.A. riots with setting in L.A., based on book written by CIA agent hypnotist-UFO contactee spy Budd Hopkins. (Note: this is an obvious "naughty but nice aliens" PR campaign that forgets to mention the U.S./Soviet massive 40 year Majestic 12 alien coöperation program and the secret alien bases; now we know who CBS works for). *Aliens 3* movie hits. Soviet Mars craft sends back photos of spaceship near Phobos (announced publicly by leading Soviet astronaut test pilot Col. Marina Popovich in L.A. and suppressed by all media), face on Mars and surrounding pyramids (signal from Voyager picked up by JPL near L.A.) map mathematically to crop circles, Jason Project (described on CNN) conducts school kids on telepresence tours via satellite (a blatant Jason Group project designed to recruit virtual reality spies), worker escapes from deepest levels of Area 51 (Dreamland, north of Las Vegas, the desert-mountain location of the video feeds for the phony Apollo program Moon landings) with evidence of aliens, government-alien developments of advanced craft, ELF for hallucinatory

PORTRAIT OF XANDOR KORZYBSKI BY JULIA COLMENARES

mind control, bizarre Frankensteinian genetic engineering experiments. Investigators risk their lives flying over Northrup, McDonnell-Douglas, and Lockheed bases to photograph UFO craft under development (totally suppressed by media but documentation and photos were available at recent L.A. Whole Life Expo). Billions spent on underground tunnels throughout the West where aliens and their human-alien hybrid progeny and grotesque genetic experiments lie suspended in ghastly tanks and CIA drug runners move billions in dope through the vast underground network to L.A. and other cities. Kennedy discovered some of this, threatened to go public after he took acid, was killed by Secret Service limo driver Greer, as clearly visible in Zapruder film (200 witnesses to his murder have all mysteriously died—warning: you may already know too much—continue reading at your own risk).

KENDRA DODSWORTH

WHAT THE FUCK IS GOING ON? Possibilities: (1) Aliens and abductions are real. Our traitorous government (or covert elements within it) has wimped out, conspired to appease our captors, and sold us out for advanced alien technology used to create the secret bases on the Moon and Mars. The Illuminati is preparing you for the public unveiling of your new rulers. The aliens are secretly running the world and will ship "the rest of us" (the secret meaning of Apple's motto) to Mars as slave labor (see previous letters for gory details). PEROT IS LEADER OF THE ALIENS. (2) It's all a massive dirty trick disinformation campaign by Bush and his Illuminati and Bilderberg Group controllers to scare the shit out of us, condition the public for the election, and further intimidate us all into new world order takeover (slavery). Either way, expect E.T. landings (real or counterfeit—how will *you* know the difference?), invasion, total mind-control/mind-fuck attempts. You may only have a few more months of freedom left. (3) Both (parallel universe). You figure it out.

WHAT YOU MUST DO IMMEDIATELY: Impeach and imprison traitor/murderer/drug smuggler Bush and his whole corrupt family. Investigate and bring to trial his many criminal conspirators in the government and elsewhere. File class law suits against aliens. Investigate and videotape UFO flights at Area 51, Northrup, and McDonnell-Douglas (contact Civilian Intelligence Network, P.O. Box 599, Gardena, CA 90248 for maps). Force Bush to disclose aliens, drug running, illegal wars, criminal incitement to riot, BCCI, secret Iraqgate National Security Directive 26, and other coverups. Read *Ride A Pale Horse* by William Cooper (P.O. Box 889, Camp Verde, AZ 86322, $24 incl. S&H); access Cooper's Citizen's Agency For Joint Intelligence BBS (modem: 602-536-7165). Investigate Perot's background thoroughly, especially his links to genocidal dictators and memberships in secret societies. And remember, this man was in bed with Nixon thirty years ago!

HOW TO CONTACT XANDOR: Whistle Blowers on phony Apollo program, underground bases, UFO technology, aliens, Majestic 12, new world order, Perot alien identity and secret-order memberships, Freedom Fighters who want to preserve our rights and continue to learn the suppressed facts by getting future letters directly, and Random Paranoids: contact me immediately (before THEY get to me), c/o MONDO 2000.

Xandor Korzybski

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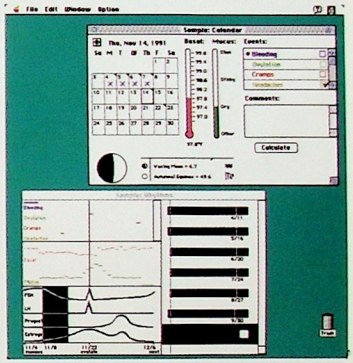

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Can't Dis this Disk

Jaime Levy's Pioneering Electronic Magazines

BY LORALIE FROMAN

Cyber Rag I, II, III and the more recent *Electronic Hollywood*—arty disk magazines for the Macintosh—are lighthearted frolics into somewhat uncharted electronic space. There aren't many disks to subscribe to these days, nor computer artists producing them. While magazines are collections of static images, the pages of these electrozines come alive with sound and animation.

Nothing too heavy here, just 800K of angst animations, goofy games, premenstrual poetry, rambunctious reviews, seductive sound samples. The appropriately appropriated *Hacker Manifesto* and a subversive "how-to" on using pay phones without paying sets the tone early on. *Isn't that against the law?* Not Ms. Levy's law. If you're still with us, click into the effluent world of sperm as it goes on an animated egg-hunt, set to a funky industro-beat. Nestle up to an interactive Noriega as he runs around Panama (you try to catch him). Move on to a Persian Gulf poem-in-motion where battleships on a cyber-sea, bombarded by incoming missiles, bob to a digitized "Give Peace a Chance." *Kuwait is free, but we paid the fee,* we're reminded. Then, if you're in the mood, slip into a slam-dis on "hippy dippy shits" whose "tie-dye shirts make punk rock look almost fresh." Here, as elsewhere, Levy tries vigorously to shake the vague psychedelic aura that clings to computer art.

One of the more irreverent offerings of Levy's disk rags are her bratty/catty trade show reviews. She gives us the low-down *MACWORLD* left out. As a regular feature, Levy tells us how she wangled her way into over-priced trade shows (try $800), and then the *coolest* and *lamest* things about them. Apparently Levy didn't like the Virtual Reality conference in San Francisco where a bunch of academics got together to "make lots of rules and definitions." The *coolest* thing was free water. "Hearing William Gibson referenced as if he discovered the planet 'Cyberspace,'" was the *lamest*.

That time Levy got in by color-xeroxing a friend's badge; another time she pretended to be a production assistant. Levy junketed to Las Vegas where crashing SIGGRAPH '91 was "no problemo, since plenty of trade floor passes were sitting only yards from the registration table."

At the Intertainment conference last October, she spoke on a panel (Interactive Magazines—The Next Publishing Revolution?) and so, she tells us, "no scamming necessary." The *coolest thing* about this gathering was "saying stupid things out loud to adults in business suits."

Tongue out of cheek, Levy says, "These trade shows are supposed to be about computer graphic art, but the artists can't even afford to go." Crashing them, then, becomes a political statement.

The first two *Cyber Rags* were programmed in HyperCard, the next two in Macromind Director. Basically you need 3 megs of RAM and a Macintosh to enter the rebel world of Jaime Levy. *Electronic Hollywood* requires a color monitor. With the variety of hardware out there, she says, some crashes are inevitable.

Cyber Rag I was Levy's NYU Master's thesis project in the film school's Interactive Telecommunications program (the techno-punk road to higher learning). That was after she skipped the "early retirement community" of San Francisco State where she majored in film/video production. It was in the hallowed computer lab at SF State that she fell in love with the nerd who introduced her to the Macintosh Interface. It's all history for the chroniclers of electronic publishing, since luckily she found it "more interesting than him."

Then on to Los Angeles, land of her birth, the place with a "bigger hard drive," tanned cyber-brats, and way more opportunities for employment. Levy supports her habits (electronic and otherwise) working as a computer graphic artist. Characteristically flip, she'll tell you that to produce a disk magazine "you gotta be a drug dealer to afford to take a couple months off to sit around your computer."

Oh, but you wouldn't do that, now would you?

"No way!" she says. "I'm a prostitute."

Disks can be obtained by sending $6 (includes shipping and handling) to Jaime Levy, PO Box 2966, Hollywood, CA 90078. Electronic Hollywood II *will be available in June. Submissions graciously accepted in any format.* M2

Loralie Froman

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A PICTURE OF N

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(WITH A LOT OF HELP FROM KEVIN)

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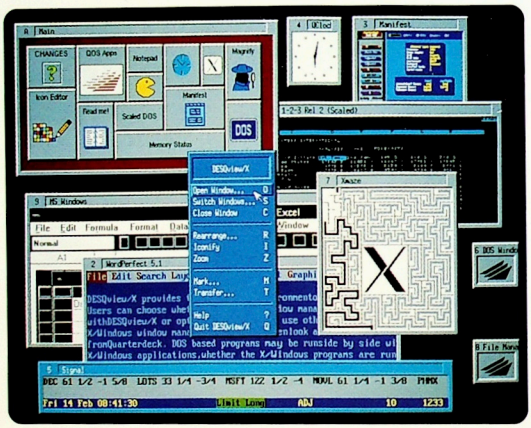

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